Human-Nonhuman Animal Connectedness in Times of Disaster

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SUMMARY

Complexity defines our relationships with nonhuman animals and we continuously live in a state of dis/connection with them. The disconnection we feel is intimately linked to how we assign worth to them, being both the reason for it and a result of it (once established it becomes self-sustaining). This study explored such feelings of dis/connect as demonstrated by the participants' words and actions for/on behalf of nonhuman animals during times of natural disaster. The way nonhuman animals are valued has significant bearing on their disaster outcomes and also impacts on the disaster resilience of many humans. A critical hermeneutic phenomenological methodology allowed for a deeper exploration of the participants' experiences. A Derridean deconstructive technique was applied as a tool for revealing deeper human-centric valuing hidden within the participants' recountings of their experiences.

A dearth of research on the more abstract facets of human-nonhuman relationships in disaster times led to the conceptualising of this study. Qualitative methods, employing unstructured in-depth interviewing sessions, were conducted with eighteen participants. The resultant three key themes around which the data was finally organised disclosed a) the more practical issues that the participants were faced with, b) evidence of the deeper, biophilic connections the participants demonstrated, and, c) evidence of the senses of socioculturally instilled disconnection demonstrated by the participants. Deeper examination of the practical issues also revealed indications of senses of dis/connection. This study adds to current understandings of human-nonhuman relationships during these times. It also contributes to an awareness of the need to ultimately eliminate current dominant human-centricity – in all aspects of life, but particularly in current models of disaster planning and management.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed…

Date... 7th February 2018

DEDICATIONS

Scamp…true to your name…still in my heart

Sacha…little rascal…little shadow

To my father, JTP… died 33 years of age…way too soon

To all the nonhumans who suffer so much

ACKNOWLEDGEMENTS

There are a number of people who have been alongside me on my passage through the PhD process and to whom I am ever grateful. I credit all of them for my arriving to this point in the process where I am able to sit and compose my acknowledgements!

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I would like to acknowledge, and thank, the participants, whose openness and willingness to be involved made the study possible in the first place. I also acknowledge and thank the many nonhumans who became involved vicariously, indirectly and by proxy. Similarly, their 'involvement' enriched this study and made it more meaningful.

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GLOSSARY

Anthropocentric/anthropocentrism – the tendency to regard the world in terms of human values and human importance; the human-centred/human-centric belief that humans are of primary importance and other life (particularly nonhuman animals) is of value only in its utility to humans; in environmental philosophy it has been posited as the primary reason (especially in Western society) for, not only a sense of human superiority and as the right to use the rest of the world at will, but also for environmental degradation and species loss

Biophilia/biophilic – generally described as the inherent human interest in/fascination with life and living systems. In this study it is used in the context of deep, intrinsic, biological connection with other nonhuman life, in particular, nonhuman animals

Connection and disconnection (dis/connection) – for the purpose of this study, *connection* is understood as being, not only deeply biological/biophilic, but also as in an emotional, psychological or transcendent context. Similarly, in this study *disconnection* refers to an emotional, psychological or transcendent state of feeling (and not always at a conscious level) isolated from the rest of nonhuman animals as a result of entrenched social conditioning.

Experiential – to do with practical, everyday, prosaic, ordinary issues/aspects of life

Holism/Holistic – in this study refers to an environmental philosophical holism in which all of the parts of a system/whole are interlinked and interdependent and intrinsically valuable

Speciesist – generally thought of as the preferencing of the human species by the human species over all other, nonhuman, animal species but can also be thought of as more broadly meaning the preferencing of one species above another. In this way, for example, the keeping of 'pets'/companion animals can be seen as speciesist

1. INTRODUCTION

If Life itself is a myriad of complexities and enigmas then no better demonstration of this can be seen than in humanity's relationship with the rest of the animal world. Not only is there enormous disparity and contradiction of attitudes toward nonhuman beings between cultures, groups or communities of any scale but also between and within individuals.

Human relationships with nonhuman animals are multifarious and span a spectrum of types of connections – from feelings of deep (biologically based) connectedness through to senses of deep disconnectedness (socioculturally conditioned attitudes and values). This thesis was primarily concerned with exploring what evidence of these dis/connections, might be revealed in times of natural disasters, which include fires, floods and earthquakes. The extent to which humans feel connected to, or disconnected from, nonhumans, impacts largely on the outcome for nonhuman animals at such times and can also play a significant role in the disaster resilience of many humans. These connections are reflected in the broader societal valuing of nonhumans and influence the decisions made for/on behalf of nonhumans in times of emergency. Commenting on this influence, in regard to public policy making, Leonard and Scammon (2007:49) state, '[e]mergency planning policies convey notions of who and what are worthy of and need protection'. A key aspect of this thesis is the demonstration of the consequences of such dominant assessments of worth, for humans and nonhumans during times of disaster.

While the chief focus of this thesis was to investigate dis/connections, and due to the inherent interlinking, a direct consequence of the course of this process was the uncovering of numerous practical aspects. These are the direct matters faced by the study's participants regarding their experiences with nonhumans during disaster events. As such, along with seeking insights into more conceptual aspects of human-nonhuman interactions and connections, attention was also paid to these experiential issues. These issues include, *inter alia*: the ability (or not) to be able to evacuate *all* of the family (including nonhuman members); the difficulties of acquiring

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emergency accommodation accepting of nonhumans; and the complications that arise when trying to manage the safety of nonhumans during the clean-up phase of a disaster event. However, during the probing of the practical matters, evidence for the underpinnings of abstract influences of the dominant philosophic paradigm of the primacy of humans was also demonstrated.

In order to explore the above (non-abstract and abstract) issues, unstructured interviews were conducted with eighteen participants. Most were companion animal 'owners', however some had other types of disaster interactions with nonhumans, as a result of their paid employment or as post-disaster volunteers (assisting either a local government council or a wildlife organisation).

Context and background

Natural disaster events (such as fires, flooding, hurricanes and cyclones) occur frequently, nationally and globally. Conservative predictions from climate scientists warn that such events are likely to increase in frequency and intensity in the ensuing decades if current levels of human impact on global ecosystems remain unchecked (see, for example, Intergovernmental Panel on Climate Change, 2014). Disasters can negatively impact all types of beings, human and nonhuman.

While inestimable numbers of wildlife are affected by natural disaster events, some of the most vulnerable nonhumans are those caught up within human-created landscapes and include companion and domesticated/farmed animals. Companion animal family members (which number in the tens of millions) in Australia are estimated to be in over 60 per cent of households (Australian Companion Animal Council, 2010). As will be seen in Chapter 2, section 3, the Australian human population density coincides to a substantial degree with areas most prone to natural hazards. Along with companion animals in these zones are those in industrial livestock farming (for example, but not limited to, chickens, pigs and dairy cows) as well as those in zoos or other types of captivity. By extrapolation, then, this points to significant numbers of this group of nonhumans which stand to be potentially affected in some way by natural disaster. Their ability to survive a disaster and the type of experience they have, to a very great extent, depends on how they are valued within society and the types of connections felt for them by the humans within that

society. Ultimately, where humans feel a greater/deeper sense of connection with nonhuman animals, the disaster experiences and outcomes for the nonhumans are more likely to be enhanced.

For those humans who connect closely with the nonhumans in their lives, successful evacuations and greater resilience to disasters will be fortified by disaster planning that is inclusive of their animals. Human relationships with nonhumans are not limited to those of animal 'owners', however. Several of this study's participants had interactions of a very different kind with nonhumans during times of disaster. These particular participants were involved in the taking of animals' lives in such circumstances. Yet, as for the 'owners', their experiences can be seen to reflect both, connectedness and disconnectedness. This further underscores the complexities of human-nonhuman relationships, beyond the participants' experiences.

Rationale for study

Until relatively recently, the emphasis of much of the pertinent literature has been centred on pragmatic, disaster management aspects of human-nonhuman relationships at such times. This includes, *inter alia*: generating greater understandings of disaster management systems; inter-agency efficiencies and cooperation capabilities; the impact of varying levels of legal and governmental stances, policies and planning measures; and animal emergency management issues from the perspective of improved evacuation success for humans (see, for example, Heath, Beck *et al*, 2001a; Heath, Kass *et al*, 2001b; Edmonds & Cutter, 2008). While there has been greater attention paid (especially since Cyclone Katrina, 2005) to human-nonhuman relationships and to the catering for animals in disasters, current models for management policies, strategies and services are still fundamentally anthropocentric and human life is still the primary focus.

There are studies which have paid attention to more abstract/ non-practical aspects of human-animal relationships during disaster events (see, for example, Hall, Ng *et* al, 2004 – investigating the psychological impacts of the human-animal bond during disasters; Irvine, 2009 – discussing the impact of human behaviours and decision making on the vulnerability of nonhumans in disaster events; Every, Due *et al*, 2016 – describing how moral evaluations of nonhumans are at play in the justification of

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which animals are included in disaster rescues). However, to date, there is a dearth of research conducted with a specific focus on considerations of the dominant Western paradigm and the embeddedness of a human/animal binary opposition leading to explorations of the consequences of human dis/connections with nonhumans in times of disaster. Though an understanding of the more pragmatic issues is essential, this coupled with more comprehensive understandings of the conceptual aspects of how and why humans perceive of, and relate to nonhumans, particularly at such times, can only lead to more inclusive and holistic approaches to the management of, and services for, both.

Having deeper understandings of why humans behave toward nonhumans facilitates the potential to change patterns of thinking and to modify behaviours or, at least, accommodate them, and ultimately create conditions that will lead to greater equitability between both, humans and nonhumans. Before better understandings of the *why* are established though, it is necessary to consider the *what*. It is the purpose of this study to contribute to the existing body of knowledge of the more profound aspects of human-animal relationships, by offering some of both, the *what* (through the participants' recounting of their experiences) and, the *why* (in the discussion/exploration of their recountings).

Conceptual framework

The conceptual framework for this thesis is based on the ontological assumption that humans exist in a state of connectedness with the rest of nonhuman nature/nonhuman beings. Such connectedness includes the extremes of this state so, therefore, spans understandings of deep connectedness through to deep disconnectedness.

The epistemological assumptions of the study are driven by broader understandings of the sociocultural constructed-ness of the aforementioned dominant Western paradigm of a human/nature divide, using a multidisciplinary approach which adopts an interpretivist stance. Key aspects of a critical hermeneutic methodological approach allowed for the exploration of the lived experience of the participants, revealing entrenched belief systems that underpin the decisions made on behalf of nonhumans before, during and after disasters. Strategic tools allowed for the execution of this methodological approach: foundational principles of environmental

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philosophy (which include notions of holism and connectedness) of were coupled with Jacques Derrida's concept of a *metaphysics of presence* and the associated establishing of binary oppositions and their inherent power differentials (see, for example, Derrida, 1976). This was done in order to explore and expose hidden, taken-for-granted suppositions about the pre-eminence of human beings, buried within the participants' accounts of their actions and beliefs. The two tactics were chosen as they enmesh and underscore each other and offer a means of thinking alternatively, beyond the restrictive parameters of the dominant model.

Within the context section (Chapter 2), an overview of several theoretical models is offered in order to provide some insight regarding the ways in which humans feel connected to nonhuman life, including: a brief outline on Bowlby's (1969, 1982a) attachment theory and bonding; Wilson's (1984) concept of biophilia; biosynergy (Rose, 2011); and other co-evolutionary arguments (see, for example, Shipman, 2011).

Likewise, consideration was given to the key influences that have led to a sense of disconnectedness from nonhumans: profound influences such as Classic thought and teachings; Judeo-Christian religious indoctrination; and the impacts of early scientific philosophy, Enlightenment science in particular (see, for example, Pepper, 1996). These deep conditionings have resulted in a dominant and embedded anthropocentric view of the rest of nonhuman nature and a human/animal binary opposition, active in thought and deed. This prevailing way of thinking is now coupled with, and reinforced by, the more modern environmental issues of population growth and an increasingly urbanised (national and global) population which has less opportunity to connect with nonhuman nature (and to, therefore, fully develop and nurture feelings of empathy for it) (Mathews, 2007).

Evidence for both of these types of dis/connections can be seen in the participants' accountings of their disaster experiences with, or on behalf of, the nonhuman beings they interacted with. The tensions that such oppositional types of connectedness create, and the consequences for disaster decisions, will be expanded on in Chapters 6 and 7.

Thesis statement and aims of the project

Tied to the ontological assumption previously noted, the thesis statement is expressed thus:

During the conditions of extreme and atypical times of disaster events the ways humans are both connected to, and disconnected from, nonhumans can be revealed and be challenged. This knowledge is sought for the broader purpose of contributing to better understanding, and improving, our relationships with nonhuman animals, more generally, as well as during times of natural disaster.

Following on from this statement, several aims were identified which directed the study and allowed for an exploration and critical interrogation of the data that was extracted from the participant interviews. The first of the aims related to the more pragmatic aspects of the participants' experiences. However, a closer reading of the associated data also revealed facets of connection and disconnection. The second and third of the aims related to notions of connection and disconnection, respectively.

> 1) To investigate the types of experiential issues in human-nonhuman interactions that might arise during times of natural disaster, such as the practicalities and logistics of evacuating with nonhumans.
> 2) To investigate what participants' responses might reveal about human connectedness with nonhumans during times of natural disaster.
> 3) To investigate what participants' responses might reveal about human disconnectedness from nonhumans during times of natural disaster.

Outline of thesis plan

The thesis is structured into eight chapters, with seven more following this introduction. The second chapter contains five main sections and provides context for the key areas covered in the thesis. The first section, through several examples, demonstrates various ways that humans have perceived of, signified and used/exploited nonhumans over time. The second section delivers understandings of biological explanations for the ways which humans are understood to connect with

nonhumans. Ways that humans are perceived to be disconnected from nonhumans are addressed in the third section of Chapter 2. The fourth section of this chapter gives contextual information on potential disaster types in Australia, and the fifth provides relevant statistics on companion and other, domesticated, animals, in this country. These last two sections are offered in order to underscore the significant numbers of non-wildlife nonhumans which can be potentially impacted during events in which both, they and humans, are vulnerable.

A review of the literature on human-nonhuman relationships in times of disaster is offered in Chapter 3 and the study's methods and methodology are covered in Chapter 4. The results and discussion for this thesis appear conjointly to avoid significant repetition and are presented in three different chapters according to the three themes which were revealed on the reviewing of the data set. Chapter 5 (Theme 1/Experiential) pertains to experiential aspects, which include, *inter alia*, disaster types, evacuation processes, temporary accommodation issues and lessons learned through adversity. Chapters 6 (Theme 2/Connections) and 7 (Theme 3/Disconnections) explore the evidence for notions of connections and disconnections, respectively, in the participants' recounting of their experiences. Finally, Chapter 8 concludes the thesis and suggests potential areas for future study. Appendix C provides anecdotal information on the impacts of disaster events on a number of nonhuman animals.

Overview of the methodology

The broader research design is qualitative in that it is a non-reductionist exploration of the data collected in order to gain deeper insights into the ways humans can be seen to both, connect and disconnect, from nonhumans during times of disasters. In particular, an analytical pluralist stance was adopted, employing principles of a critical hermeneutic phenomenology (see, for example, Lopez and Willis, 2004), to allow for a more probing in-depth analysis of the participant responses, along with the decidedly organisational approach of a thematic analysis (both in the structured stages that were followed for conducting the analysis as well as in the manner in which the data was organised for access). A thematic analysis based on Braun and Clarke's (2006) model allowed for the step-wise management of a large and complex

data set (the Excel spreadsheet into which the data was compiled eventually contained twenty six columns of codes and over one thousand rows/cells of dialogue – specifically related to nonhumans – extracted from the complete participant transcripts).

As the study was designed to be an investigation into the participants' experiences, unstructured interviews were conducted. These allowed for free flowing, conversational dialogue (between the participant and the interviewer) that (in the verbal interviews) encouraged spontaneity, aided in overcoming inhibition and provided the opportunity to insert questions in order to clarify points and/or encourage recall. The interviews were conducted face-to-face, by telephone or by email. Eighteen interviews were conducted, with the chief focus being on learning as much as possible about the participants' interactions with, and on behalf of, the animals with whom they shared their experience.

Once transcribed, the segments selected as data were those which specifically related to human-animal interactions. The data were organised according to codes and, in turn, themes and stored in an Excel spreadsheet. Codes include, *inter alia*, Animals as Family (AAF), Awareness Through Adversity (ATA), Animals As Priority (AAP), Cooperation Between People For Animals (CBPFA), Divided Loyalties (DL) and Silent Dualism (S/DUAL). The contents of the units of analysis were 'unpacked', in part, using Derrida's deconstructive approach, to uncover hidden values and messages that would ultimately illuminate the types of connections: either revealing deeper, more biophilic connections with nonhumans or instances of how embedded sociocultural valuing creates a schism between the human world and the nonhuman one, and what the significance of these mean for both, humans and nonhumans, in times of disaster. Chapter 4, Methodology, provides a detailed discussion of the methods used to obtain and organise the data corpus and subsequent data set, as well as the philosophical underpinnings of the methodological approach.

Terms used

1) The equation $\frac{Human}{Nature}$ has been devised for this project to visually reinforce the hierarchical nature of the human/nature binary. It is used in context of discussing the entrenched notion of a separation of humans from the rest of nature/the rest of the,

nonhuman animal, world and, specific to this study, the concept of disconnection. It is important that this binary opposition is understood as a sociocultural construct and that human-nonhuman relationships are far more complex, in all aspects, than a reductive expression of a two-poled, dichotomy.

2) The words 'pet' and 'owner' are written in this project contained within quotation marks to highlight that they are deemed here to be less desirable terms and value laden: 'pet' minimises the nonhuman and 'owner' automatically assigns the nonhuman status as a possession. 'Pets' are generally referred to here as companion animals, even though it is felt that this assignation ('companion animal') still reflects an anthropocentric valuing.

3) The term *Person In Care/Persons In Care* (PIC/PICs) has been coined for this thesis as it is felt there is less of a power differential between the human and the nonhuman in the expression and that it is a more politically neutral than the term 'guardian' (guardian[1] is connotative of an appointed position of authority of the one over the other, despite there being less politically charged usages of the word) and, as such, goes some way to aid in the eroding of the $\frac{Human}{Nature}$ binary.

4) The term *pis aller*[2] shooting has been composed in this project to help draw a distinction between the types of shooting that hunters engage in when hunting and the type of shooting when euthanizing ailing nonhuman animals specifically in disaster circumstances; *pis aller* shooting is defined as 'last resort' shooting – when there is no practical way of saving a nonhuman's life then the last resort is to take their life in order to end their suffering as quickly as possible. The concept will be expanded on in Chapter 7.

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[1] a) - guardian – one who has the care of the person or property of another, Meriam-Webster online dictionary, https://www.merriam-webster.com/dictionary/guardian
b) – guardian – a person who has the legal right and responsibility of taking care of someone who cannot take care of himself or herself, such as a child whose parents have died, Cambridge Dictionary online, http://dictionary.cambridge.org/dictionary/english/guardian
c) – guardian – 1) a person who guards, protects, or takes care of another person, property etc. 2) a person legally placed in charge of the affairs of a minor or of a person of unsound mind, Collins Dictionary online, American definition (the English definition on this site was similar but lengthier) https://www.collinsdictionary.com/dictionary/english/guardian
d) – guardian synonyms: Thesaurus.com suggests synonyms that range from the more politically neutral, such as 'champion' to the more politically charged, such as 'custodian', steward', 'supervisor', Thesaurus.com, http://www.thesaurus.com/browse/guardian
[2] *Pis aller* is a French term (noun) which translates as 'the last resort or the final resource' (Dictionary.com, http://www.dictionary.com/browse/pis-aller on line 22/5/2017).

2. HUMAN-NONHUMAN RELATIONSHIPS: CONTEXT

2.1 An historical overview

Describing the complexity of human-nonhuman relationships, Gary Francione (2008: Loc 136) states,

> …we humans really do suffer from moral schizophrenia in the way we think about nonhumans. We treat some nonhumans as persons, as members of our families; we treat some as things that we eat or use in other ways. And we seek to justify human superiority on the basis of our supposed rationality.

But this, at once irrational and multifaceted, attitude toward nonhumans is not a phenomenon exclusive to modern humanity. Its roots are buried deeply – enmeshed within all the processes directing the human journey from pre-historic beings to the historic and on, as the following examples will demonstrate.

In order to understand current dominant human attitudes toward other, nonhuman, animals it is necessary to provide some perspective and historical context. This section discusses several key examples that illustrate the ways humans have perceived of, represented, or used nonhuman beings across millennia. The examples broadly point toward the complexity of human relationships with the rest of nature, the fascination with it and the beginnings of a pathway to a largely dualistic relationship with it.

Humans have a deep and tangled history of fascination with other animals. Archaeological evidence indicates that at the time of production of some of the earliest representations and artefacts of animals, humans were already omnivores (extant apes and humans descended from a common plant eating ancestor) (Milton 1999). This points to an already complex relationship (a nascent dualism – or pluralism) with other animals, seeing them, at least, as a source of food , a source of inspiration and, most likely, given that they would have lived amongst them, as a type of kin, somehow the same yet different.

Beautiful Palaeolithic representations of animals on the walls of the Lascaux caves, South-western France, date from around 13 000 BP (Valladas, Cachier et al. 1992) and include horses (predominantly), stags, bulls (one over 5 metres long), felines and

wolves (there are, interestingly, few human representations). However, earlier signs of deliberate representations of animals have been recorded. Conard (2003) describes two ivory sculptures, one a bird and the other resembling a horse, discovered at Hohle Fels Cave, South-western Germany, which date back more than 30 000 years. As far back as 125 000 years ago, in the south of France, there appears to be evidence of symbolic use of a wolf skull, deliberately positioned at the entrance to a cave which was used for human shelter (Kalof 2011:1).

As human cultures have developed over thousands of years, animals have been worshipped, ritualistically celebrated and sacrificed. Indeed some of these customs are not so ancient. Sergis (2010) writes of dog sacrifice in both ancient *and* modern Greece. Discussing the fluid status/role of the dog (high/low status, god/demon attributes), he describes the custom of *kynomartyrion* (dog torture), a sacrificial behaviour which was still taking place in some areas of Greece into the 1970s (2010:62).

Clarence-Smith (2004:271) observes that records of the first millennium CE indicate the common use of horses and elephants as 'symbols of power and machines[3] of war' but that by the second millennium CE elephants began to lose favour to horses for their greater ease of handling and breeding. Not only did horses come to be seen as status symbols of those with greater wealth but their speed and stamina and their ability to be ridden allowed for travelling far greater distances, extending the potential for trading, conquering (and the associated transmutation of cultural values). Anthony (2010) even links the domestication of the horse to the spread of Proto-Indo-European language.

Around 10 000 years ago hunting began to give way to seed sowing and cultivation and the tending of herds (Mason 2011:32). The path to domestication was set and so was the changing role of animals (certainly those capable of being domesticated) – from sources of power, mystical and physical, in themselves to objects of human dominance and control.

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[3] Describing these animals as *machines* does little to challenge the Cartesian binary, which will be described in *A Legacy of Science*, page 30

Mason (2011) notes cattle came to play a significant role in early civilisations - worshiped as symbols of strength; sources for the acquisition of power through dominance, sacrifice and consumption, especially for males; symbols of the cycle of life from fertility and creation to death; markers of wealth; labourers; and producers of food, particularly dairy. They (and other, domesticated and hunted animals) played a role in community bonding, when, as sacrificial animals, they were slaughtered and shared as a special food source with community members only, strengthening the sense of kinship and bonds within the community (Lev-Tov and McGeough 2006; Newmyer 2011b). Mason (2011:25-27) posits that these community-only rituals would also have had the effect of guilt sharing. He describes competing aspects of developing humans' relationships with other animals: their undoubted interest and fascination with them and the ability to learn from them and their deep sense of kinship with other animals (evidenced through archaeological remains of tributes and rituals). His belief is that the rituals would have served a dual purpose of guilt-spreading (an assuagement of feelings for the taking of the lives of the 'kin' animals) as well as group bonding. He cites Clark [1977:18][4] (2011:37), who argues,

> '[w]hile men still felt a kinship with animals, to eat them was a crime against the group, and expiation could be achieved only by a ritual feast in which all were involved'

Kalof (2011:5,6) describes the use of cattle as 'war equipment': cattle bearing burning bundles of wood sent by the Romans to stampede through enemy camps. Likewise for elephants, when, decorated and fed fermented wine to encourage 'wild behaviour', were used by the Greeks to 'terrify' their enemies.

As well as being utilized for their physical strength, their ability to strike fear in an enemy, or as a food source, animals were (and, indeed, continue to be) exploited for entertainment purposes, frequently subjects of the most horrendous cruelty, as was particularly the case in the Roman era of the games of the Flavian Amphitheatre/Colosseum (Bodson 1986; Shelton 2011). Tragically high numbers of animals (and humans) were slaughtered in the Roman arenas in displays representing, variously: power over nature in general; power of, and over, stronger

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[4] Clark, Kenneth, 1977, *Animals and Men: Their Relationship as Reflected in Western Art from Prehistory to the Present Day*, William Morrow & Co., New York

animals; power of wealth by squandering; pleasure in torture; and even revenge killing of predators of livestock (Mackinnon 2006; Kalof 2011).

Zoos, not a modern concept but sometimes still considered as controversial (Jamieson 1986; Bostock 2003; Braverman 2012; Bowkett 2014), were constructed originally solely as entertainment for humans (larger modern zoos are concerned about species preservation as well as audience viewing 'pleasure' and education). In Ancient Greece, 'parádeisos', or paradise gardens, were filled with wild animals for the pleasure of the wealthy – as much for hunting as for viewing and symbols of wealth and power (Hunt 2011; Kalof 2011; Morris 2011).

The above examples provide insight into the multifariousness that is contained within the seemingly simplistic, reductive label of 'human/animal relationships'. Even before any moral or philosophical aspects are explored, it is apparent that there is an imbalance of power (as there is bound up within any dichotomy), weighted heavily in the favour of humans.

Complexities in how humans perceived, and used, other animals are apparent from the first abstract representations created, and on. While perceptions can change or modify across time and culture, some notions become dominant, broadly taken as ultimate truths, and deeply buried within ideologies, dogmas and discourses. Many things contribute to this. Commonplace political relationships can be seen to wield power in everyday life around us now. It is entirely reasonable to believe that this has always been so within human societies. Some ideas are more 'convenient' than others to explain phenomena, especially when we are not privy to more complete understandings. Section 2.3 offers some insights into the pathway of an ingrained and influential understanding – that of a human/nature divide. Before this, though, the following section, 2.2, will provide some background on concepts of connectedness of humans to nonhuman animals.

2.2 Insights into biological bases for human-nonhuman connections

Evolutionary thinking gives me relatedness, continuity with the past, common ground with other life, a kind of celebration of diversity…In its broadest sense, evolution extends our kinship to the atoms and to the stars, confirms our continuity with the chemical elements and an extinct sun from which we come, although such

things are too remote for much fellow-feeling. My relationship to plants and animals
is more vivid than that (Paul Shepard, 1997)[5].

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There are various perspectives on the reasons for humans feeling a sense of connectedness with the rest of the, nonhuman, animal world (or, indeed, the rest of nature), a brief introduction to some of which will be offered here.

Ainsworth (1979, 1989), Ainsworth and Bowlby (1991) and Bowlby (1969, 1982a, 1982b), have extensively developed Bowlby's, 1969,

'ethological-evolutionary attachment theory…an essential part of the ground plan of
the human species – as well as that of many other species – for an infant to become
attached to a mother figure' (Ainsworth, 1979:932).

Bowlby (1982:156) addressed the unique behaviour between an offspring (in birds and mammals) and its mother that was different to the ways they behaved toward others. He named the phenomenon as 'attachment behaviour' – the consequence of which is the achieving of proximity to the parent/mother. Despite drawing heavily on ethologist, Lorenz's[6] accounts of animal behaviour and bonding, Bowlby's attachment theory was primarily used in context of human (mother and child) behaviours. It has, in more recent time, been used in explorations of bonding beyond the human-human. For instance, Beck and Madresh (2008) and Sable (1995) extend Bowlby's primary focus on human, mother/child, attachments to consider human-nonhuman attachments, specifically companion animals.

Sable (1995:336) notes that companion animals come to be seen as family members and are able to offer emotional connections/attachment bonds that can add to the sense of well-being of the human family members. He argues (1995:335) that the capacity to form an affectional attachment can move from a specific, close familial relationship to more general relationships. It is further argued that, as proximity is a key factor in attachment formation, regular close exposure to a companion animal facilitates the opportunity to form such bonds – bonds which can become so strong

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[5] Shepard, P 1997, *The Others: How Animals Made us Human*, Island Press/Shearwater Books,
Washington DC
[6] See, for example, Konrad Lorenz (1961) *King Solomon's Ring* Translated by Marjorie Kerr Wilson.
Methuen, London

that grief can result from the breaking of them through loss/death of the nonhuman[7] (pg. 336). Using adapted relationship (human-human) measures, Beck and Madresh's study found that 'relationships with pets were more secure on every measure' (2008:43).

Such studies as these, however, are specifically focussed on companion animals with whom there is a close relationship. It should also be noted here that there is a spectrum of caring and attachment types and levels within this category of human-nonhuman relationships (as, indeed, there is in all types of human-nonhuman relationships). Some people feel deeper connections with nonhuman life than do others. Some even connect more closely with particular nonhumans within a household of several.

Painting with a broader brush yet looking for a more fundamental cause, Wilson (1984), proposed the biophilia hypothesis to describe the human fascination with the natural world – 'the innate tendency to focus on life and lifelike processes' (pg.1). He states (pg. 9) '[b]ecause species diversity was created prior to humanity, and because we evolved within it, we have never fathomed its limits': humans are instinctively drawn to understand the world around them, to understand how they are bound up within it, what their place is within it and what their relationship is with the rest of life around them. Wilson argues (pg.12) that, in the course of the evolution/development of the brain, processes of natural selection have been impacted on by unfolding cultural processes ('cultural filters'). Humans are caught between these two poles of understanding existence (the culturally defined meanings versus the inherently/instinctively understood), constantly trying to find a balance and an ultimate truth about our reality.

In a similar vein, Kellert (1993:42-59) advances the notion that the human requirement (or 'deep dependence' on) for the rest of natural world is not simply to fulfil fundamental physical needs but also the fulfilment of higher needs such as emotional satisfaction, cognitive stimulation, aesthetic pleasure and spiritual/psychic awareness and growth. He asserts that there is a strong link between the type of

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[7] Indeed, Blazina *et al*, (2011:4) acknowledge that such grief can even surpass that felt on the loss of a human companion. (Blazina C, Boyraz G, Shen-Miller D, 2011, in *The Psychology of the Human-Animal Bond: A Resource for Clinicians and Researchers*, editors Blazina Christopher, Güler Boyraz, David Shen-Miller, Springer, New York, Chpt 1, pp. 3-24

relationship humans have with the rest of nature and the strength and quality of our sense of personal identity. He posits a set of values – or 'learning rules' (pg. 43) – by which we broadly determine and demonstrate the type of relationship we have with nature and non-human beings. These values are repeated here in the following table, Table 1.

Value Type	Essence of Value
Utilitarian	Practical and physical benefits derived from nature for sustenance, protection and security
Naturalistic	Satisfaction derived from direct contact with nature, a sense of wonder and awe at its diversity and complexity, a heightened awareness of it and desire to explore it, mental and physiological benefits
Ecologist-Scientific	Ecological interests (more integrative, less reductionist than scientific) –drives exploration of interconnection and interdependence with all parts of biosphere, recognition of crucial importance of processes at bottom of biological food chains. Scientific more focussed on constituent elements and not necessarily entire organism, or feature, or interrelationships between organisms and habitats
Aesthetic	Physical beauty, appealing to all senses, invoking deep pleasure, can evoke profound responses

Symbolic	Reflects human usage of nature, particularly nonhuman animals, as a means of conveying abstract ideas and thoughts in development of language, during deep human evolution. Continues to be the case in modern culture, as in, for example, advertising or sporting mascots
Humanistic	Human experience of feeling strong affection for elements of nature, living or landscape (this is an aspect that is at play in the emotional connection to place/sense of place)
Moralistic	A sense of ethical responsibility or respect for the natural world; a sense of it as a living entity deserving of moral consideration; engendering feelings of kinship, affiliation, cooperation, reciprocity and altruism (these sorts of characteristics would come into play in those humans who devote themselves to environmental and animal welfare/rights issues)
Dominionistic	The human desire to conquer/master/control the natural world in its narrowest sense; also relates to increased knowledge of the natural world and to survival within it
Negativistic	Associated with emotions of fear and aversion and, while an evolutionary

advantage can be seen in avoiding aspects of the natural world (such as poisonous invertebrates) in the interests of self/group/kin preservation, irrational or unfounded fear and aversion (biophobia) can result in a sense of alienation and disconnection from the natural world – which, in turn, leads to reduced respect for it and the degradation of it

Table 1 Kellert's Nine Value Types for Human Relationships with Nonhuman Nature (Source: Kellert 1993:42-59)

As Kellert (pg. 59) notes, he does not offer the nine outlined values as proof of the 'biophilia complex' but as an ordering/taxonomy by which to explore their evolutionary bases as adaptive behaviours.

It could be argued, however, that the biophilia hypothesis, as outlined above – and despite it being a model that seeks an account for the deep connectedness between the human and the nonhuman world – is human-centric in many key aspects. It is heavily focussed on how humans relate to the rest of nature, what they derive from it and how they can/should define/redefine their relationship with it to the betterment of all of nature. It draws heavily on biopsychosocial measures that are human-centred and has a primary 'end goal', or focus, of better valuing and conserving the nonhuman world for the benefit of humans;

> Nature's diversity and healthy functioning are worthy of maintenance because they represent the best chance for people to experience a satisfying and meaningful existence. (Kellert, 1993:60)

As such, it is a mostly one-way process that shows little attention to reciprocity (or mutual exchanges) between nonhumans and humans or to links/connections between nonhumans to nonhumans. In this manner, it can be seen to reinforce the status quo of a human/nature binary rather than weaken it. Rose (2011:248) takes this same position when he asserts that biophilia, as outlined by 'its main proponents', becomes

a 'self-serving and self-aggrandizing act'. Drawing on Corning's concepts of Holistic Darwinism[8] and Synergism[9], Rose uses the term *biosynergy* as an alternative to *biophilia* and argues that the latter is associated with the type of human to nonhuman bonding that is essentially for the fulfilment of humans whereas the former is fundamentally based on cooperation, reciprocity and mutual benefit/satisfaction and more likely to result in broader environmental benefits for all, human and nonhuman – 'the mutual enrichment of life' (2011:245)

Nonetheless, the term *biophilia* itself is a broad one and can be used inclusively/holistically if it is borne in mind that the suffix 'bio' encompasses all organic life. For that reason it will still be used in its broadest sense in this project to refer to a 'philia' – attraction/affinity – felt for, and between, all types of animals, human and nonhuman.

Noting the scepticism that many expressed at Wilson's (1984) proposal of *biophilia* as a serious explanation for humans' affinity with nature (and even his own admission of its lack of 'hard science'), Olmert (2009:12-13) concedes that what Wilson's hypothesis 'lacked [was a] smoking gun'. As it happens, around the same time Wilson was postulating his theory, the biological 'smoking gun' was identified[10]. Oxytocin, a hormone, acts as a neurotransmitter in the brain and drives the urge for social connection between humans. It is also the key chemical involved in the formation of human-nonhuman bonds (and nonhuman-nonhuman bonds), triggering the process that creates the sense of attachment – a process that can be

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[8] See, for example, Corning, PA, 2008, 'Holistic Darwinism: The New Evolutionary Paradigm and Some Implications for the Social Sciences, *Politics and the Life Sciences*, 27 (1), pp22-54. Corning argues here that there has been a recent new paradigm of interdisciplinarity emerging, within evolutionary biology and associated disciplines, which has implications for the social sciences. It is the focus on synthesis of previously considered separate fields of study that is leading to more holistic world views of evolutionary processes with an emphasis particularly (from the genetic level through to the level of groups) on cooperation and synergistic phenomena.

[9] See, for example, Corning, PA, 2000, '"The Synergism Hypothesis": On the Concept of Synergy and its Role in the Evolution of Complex Systems', *Journal of Social and Evolutionary Systems*, 21 (2), pp133-172. Again, Corning discusses the notion of synergy as the interdependence/interconnection between 'two or more parts, elements or individuals' and its ubiquity in 'nature and in human societies alike' (p133). In describing his Synergism Hypothesis, he argues that cooperative behaviours, at all levels of organic life, lead to 'positive functional consequences [and] can become 'units' of selection that differentially favour the survival and reproduction of the "parts" (and their genes)' (p152) .

[10] Oxytocin was discovered early in the 20th century but it was not until the 1970s that its role in attraction and nurturance in mother/baby relationships was identified. By the 1990s its role in social bonding between humans and then between humans and nonhumans was established (Olmert, 2009).

stimulated by sight as well as contact or spoken word (pg. 31). Neuroeconomist, Paul Zak, terms it the 'molecule of connection' (Azar, 2011 on line).

Also taking a co-evolutionary[11] perspective, Shipman (2011:271) argues that humans feel affection for and companionship with, nonhumans as we have evolved to be connected with them and that this has been a critical factor in our own evolutionary survival. She also argues (pg. 272) that 'pets' are not 'simply the leftovers of the domestication process kept around for some whimsical reason[12]; they fulfil a need in our lives' and the association brings with it numerous benefits to humans. But, more than this, Shipman (pg. 275) further contends that the human-nonhuman connection was a driving force in three critical phases of human development: the making of tools; the use of symbolism and the acquiring of language; and the domestication of animals and the beginnings of permanent settlements. Possibly paradoxically, this point will be raised again in the following section (2.3.1) in the context of human-nonhuman disconnections.

2.3 Overview of the origins of a human/nature divide/disconnection

The notion that humanity is somehow separate from the rest of the animal world is so deeply entrenched (and if not overtly then certainly covertly), particularly in Western thought, that the idea is a taken-for-granted 'truth' that generally goes unchallenged in day to day life. Often it is so ingrained that it is all but invisible at superficial levels of reflection or understanding.

The following discussion provides context for understanding key influences leading to the formation of the dominant western paradigm for perceiving humanity's place in nature. Three philosophical traditions – classical philosophical teachings, Judeo-Christian dogma and Enlightenment scientific philosophy – have each played a

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[11] Corning (2000) holds that the term 'coevolution' is one the many terms that fall under the 'umbrella' of Synergism (Corning, PA, 2000, '"The Synergism Hypothesis": On the Concept of Synergy and its Role in the Evolution of Complex Systems', *Journal of Social and Evolutionary Systems*, 21 (2), pp133-172)

[12] This stands in juxtaposition somewhat to Shepard's (1993:287) label of 'denatured goofies' for companion animals, although he is concerned with the proliferation of 'pet' animals and the loss of /reduced numbers of wild animals. Nonetheless, the comment in itself upholds the status quo of a hierarchical valuing of nonhuman life. (Shepard P, 1993, 'On Animal Friends' in *The Biophilia Hypothesis*, edited by Stephen R Kellert and Edward O Wilson, Island Press, Washington, Chapter 9, pp275-300)

primary role in entrenching notions of human superiority over the rest of the natural world.

2.3.1 Dominant Western traditions and philosophies

Historical perspectives

In describing the beginnings of animal domestication and progressively agrarian societies, along with the establishing of settlements, Mason (2011), contends there would have been increasing opportunities to observe mating behaviours of animals in a more contained and continuous environment. He points to this as leading to a growing understanding of the male role in reproduction, which was previously attributed to female powers of fertility (until this time there would have been no obvious reason to associate sexual reproductive acts with the production of progeny due to the time difference between the act/conception and birth). The discovery of the significance of the male role, and now an understanding of paternity, would have been an important factor in the rise of patriarchy and its inherent devaluing of the feminine: no longer were females privileged with mystical and special powers of fertility – the male role was recognised as crucial in the creation of new life. Feminist writers (see, for example, French, 1986; Adams, 1995; Adams & Donovan, 1995) add to and extend the notion of the consequent rise of male dominance. They draw a connection between that and the subsequent subjugation/oppression of women and nonhuman animals, and of an increasing, and hubristic, sense of dominance over nature, more broadly.

Occurring at the same time as the shift in gender roles was the growing awareness of the ability to exercise greater control over nature – a perception imparted through the preparing of land for farming and the domesticating of animals – leading to a power shift in relations with the rest of the natural world, an increasing sense of mastery over it and, ultimately, to the ensuing devaluing of animals and their 'natural' roles. Human populations were beginning to increase in numbers, necessitating steady, more reliable sources of food. Animals were now becoming a valuable 'at hand' resource and were no longer merely sources of awe and inspiration or 'bounties' from special hunting efforts (with afforded ritualised respect behaviours shown to those animals who sacrificed their lives). Mason (2011) describes this shift in perception:

'Before domestication, the powerful souls or supernaturals (or gods) were animal, and primal people looked up to them; after domestication, the gods were humanoid, and people looked down on animals…animal-using agrarians stripped animals of their souls and powers and put them in what they perceived to be their proper place: in the service of superior humankind' (Mason, 2011:39).

The compelling need for controllable, reliable food sources thus proclaimed a future of increasing exploitation of animals and anchored the interrelated, and to-be-far-reaching, preoccupation with wealth building (and the concomitant entrenching of hierarchical societies based on power imbalances). Even the *seemingly* benign model of stewardship (what Mason (2011:35) refers to as the 'Shepherd-Flock Model'), with a 'Good Shepherd' watching over his animals, property and family, is still based on the exploitation of nature and hierarchy and power imbalance. Opting for a position of respect, rather than responsibility, for the rest of the natural world, Gould (2007:48-49) unambiguously states his case against the hubristic notion of a human role of stewardship, which he claims is,

'…rooted in the old sin of pride and exaggerated self-importance. We are one among millions of species, stewards of nothing. By what argument could we, arising just a geological microsecond ago, become responsible for the affairs of a world 4.5 billion years old, teeming with life that has been evolving and diversifying for at least three-quarters of that immense span? Nature does not exist for us, had no idea we were coming, and doesn't give a damn about us'.

A sad irony resides in understanding that the prevailing (antecedent to the current), social system of that ancient era – which would amplify into the capitalist/materialist, market-driven model that now dominates the world – and which had already begun to drive a solid wedge between humans and other animals, was to a great extent enabled through the efforts and sacrifices of animals themselves.

The influence of Classic thought

The changing values outlined above spread not only laterally but also longitudinally. By the fullness of the Ancient Greek and Roman civilisations, notions of animals as inferior to humans were well established. Building on earlier perceived divisions between humans and other animals, Classical thinking from the Greco-Roman era, particularly for Western thought, has had far reaching influence on the entrenchment of dominant attitudes toward the rest of the non-human world: passed on formally through various philosophical schools of thought and teaching and literature and through everyday social exchanges – via what Dawkins (2006), terms *memes* (that is, culturally transmitted from individual to individual and forward through in time).

Newmyer (2011a:3) notes that Alcmaeon of Croton (*c*.5th century BCE) is attributed as being the earliest known thinker in the Greek tradition to propose the notion that humans were intellectually superior to non-human beings, 'inaugurat[ing] the belief that man alone of animals is rational, a notion that became a fundamental assumption in much subsequent classical speculation on animals'. The Stoic school of thought (particularly Chrysippus [*c*.280-207 BCE], at one time head of the school) (2011:3) further reinforced this notion of lack of rationality in animals when they taught that animals were driven by instincts (or impulses) alone, rather than reason, and for this fact it was not necessary for humans to feel any responsibility toward them.

Whilst there were those who shared opposing points of view[13], reflected in the writings/teachings of key, influential thinkers from this era (or modified to some degree) are the same basic assumptions: that animals were incapable of rationality, that they lacked souls and that they deserved no special moral consideration. It is these assumptions that provided the foundation upon which the prevailing world view in Western thought came to be built.

Aristotle devoted considerable effort to the biological classification of life on earth, devising a system of biological continuity, whereby life progressed from the simplest to the most complex: from inanimate to lower plants (lichen *et cetera*) to higher plants to bloodless life (invertebrates) to blooded life (vertebrates – mammals on top) to humans at the pinnacle (Brandt and Reyna 2011), with each tier intended to fulfil the teleological purpose of serving the tier above it.

This theory/concept of *sunecheia* (Newmyer, 2011:7), or *scala naturae* (Marshall 1994:75) (or 'Ladder of Life'), was, in turn, to be found echoed in Medieval theological and philosophical thought as 'The Great Chain Of Being' - a popular concept in Christian doctrine until around the time of the Industrial Revolution, where the notion began to lose favour (Marshall 1994:218-221). In this latter context, the 'chain' represented the hierarchical (and ascending) linking between lower life (including plants and animals), humans, heaven, angels and God. Despite the term's diminished usage, the doctrine (and the metaphor) is, none-the-less, one which has become embedded in Western thought and has surreptitiously/covertly permeated

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[13] The discussion in this section concerns the *dominant* world view. A brief overview of alternative thinkers will be offered in Chapter 7, page 197

everyday discourse and common understandings ('chain of being' and 'ladder of life' were eventually to become idiomatic expressions for the notion of a linear progression of evolutionary processes). Indeed, St. Pierre (1998:261) declares the concept of the Great Chain of Being as being 'one of the most powerful presuppositions in Western thought… (and)…central to the development of thought in Western systems', particularly, he notes, that of law. It reinforced (and continues to do so) the already extant perception of the inferiority of nonhuman animals based on their presumed lack of ability for rational thought and through this, reinforced and vindicated the subordination of them. White (2009; 2012) describes the influence of this line of thinking and valuing as still active in current Australian law and the consequent lack of seriousness with which nonhumans are provided for, legally, in times of disaster.

After the publication of Darwin's *On The Origin Of Species*[14], in 1859, and through incomplete understanding (or mis-use), the 'chain' and the 'link' notion became commonly associated with the theory of evolution, particularly in regard to human evolution. The phrase 'missing link' has been used, both descriptively and euphemistically, to understand supposed 'discrepancies' in fossil records. The enmeshing of the 'precepts' of *scala naturae* and 'The Great Chain of Being' fuelled the erroneous supposition that life has evolved in a linear progression from the simplest forms to the most complex (with all the inherent value judgements attached). Not only was humanity deemed to be at the apex of life on earth, the different stages of human evolution were seen to have occurred in linear progression with modern humans (*homo sapiens sapiens*) being the pinnacle of human evolution. Even well into the 20th century, due to popular interpretations of evolutionary processes and perceived inadequacies in fossil records, notions of an incomplete progression of hominid fossils leading to *homo sapiens sapiens* existed, and that there was somewhere to be found a 'missing link' (a transitional phase from more ape like creatures to more human) to 'logically' complete the sequence (Smith and Sullivan 2007). In time, the term 'missing link' became a part of the vernacular to denigrate someone who was considered to be socially, in some way, a sub-par human being, exposing the value judgement inherent in the 'progression' concept.

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[14] Darwin, Charles, On the Origin of Species, first published on November 24, 1859 in London by John Murray

The doctrine of linear progression has become so deeply embedded that it has since guided all manner of thinking - across generations and cultures. Words are not the only form of communication. Graphic images can convey as much information (and sometimes more). Some graphics are used so commonly, that they are instantly recognised and understood and become icons of that which they represent. One of the most readily recognisable evolution icons (and in the 'Ladder' model) is the graphic/visual trope showing a progression from an ape through several (so inferred) evolutionary steps of human development to a modern human[15] (Conniff and Giller, 2015). Below, Figure 1, from Gould's (1990:31) collection of evolution icons provides an insight into the cross-cultural usage of the icon, while Figure 2, a promotional image for the 1992 film, *'Encino Man'*, offers an example of the concept's pervasion of popular culture. Another example of its use in popular culture can be seen in Figure 3, where Matt Groening, creator of *The Simpsons*, has humorously used the icon to depict the 'evolution' of Homer Simpson.

(Figure 1 has been removed due to copyright restrictions)

Figure 1 Cross-cultural use of the evolution icon   (Source: Gould, SJ, *Wonderful Life***, 1990:31)**

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[15] As an interesting aside, this graphic representation also points to another, intriguing, and moral, issue: at which point along this continuum would moral rights be automatically assigned. In other words, how human would a human have to be in order to be afforded equal consideration, morally and ethically, as a human?

(Figure 2 has been removed due to copyright restrictions)

Figure 2 A film poster for the movie, *Encino Man*, using the visual trope for evolution (Source: https://philroberts.com/movie-posters/encino_man available online 8/3/2016)

(Figure 3 has been removed due to copyright restrictions)

Figure 3 'Neanderslob to Homersapien', drawn by *The Simpsons* creator, Matt Groening, and using the icon for evolution (Source: Richard Conniff and Geoffrey Giller, *Cosmos Magazine*, 23rd March, 2015, available online, https://cosmosmagazine.com/society/evolution-icon)

The ubiquity, and instant recognition, of the 'Ladder of Progress' icon serves to demonstrate how embedded certain erroneous, simplistic notions can be. In this case, what is suggested (through direct visual representation and through entrenched understandings) is that, *inter alia*, life evolves from the simplest (nonhuman end) to the most complex (human end); that things at the 'simple' end of the 'Ladder' have less value than those at the 'complex' end; that the process is unidirectional (and separation is inevitable).[16] Such commonly used and accepted concepts go unchallenged, become invisible in discourse and serve to reinforce the status quo of (power, and usage of) certain concepts (in this instance, that of human superiority and, therefore, entitlement) and, in the process, serve to constrain the *need* to challenge… 'and the comfortably familiar becomes a prison of thought' (Gould, 1990:27).[17]

Taking a step out to a bigger picture view, and extrapolating (beyond human evolution) the valuing inherent in this concept, with its embedded 'simple to complex' doctrine, all other nonhuman life is positioned on the lower 'rungs of the ladder', below humans. Such a concept ignores the complexity and interlinking between all life and the intrinsic value of each individual part of the whole.

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[16] Reading from left to right (sinister to dexter – another value laden binary implicit here) is another Western tradition that sees its roots in Classic traditions (See, for example, Shaki, S., M. H. Fischer, et al. (2012). "Direction counts: A comparative study of spatially directional counting biases in cultures with different reading directions." Journal of Experimental Child Psychology **112**(2): 275-281.; Wiseman, R. and A. M. Owen (2017). "Turning the Other Lobe: Directional Biases in Brain Diagrams." i-Perception **8**(3): 2041669517707769.

[17] Further evidence that this misconception still abounds was to be seen on a recent Australian reality television program (*I'm a Celebrity…Get Me Out of Here,* Channel 10, 7.30PM Feb 15th, 2016), when contestants were discussing the evolution of humans and querying why, if humans evolved from monkeys, had the monkeys not evolved. Such a question demonstrates a lack of understanding of evolutionary processes and reveals thinking that is 'locked in' (as per Gould's 'prison of thought' concept) on the notion of a linear progression. Mind you, one of the contestants on the program had an intriguing alternative explanation – aliens were responsible for human evolution! Footage of the conversation can be seen via the following links:
[[https://www.youtube.com/watch?v=twLa8fBJA9g&feature=player_embedded] , [http://www.news.com.au/entertainment/tv/reality-tv/shane-warne-believes-alien-experimentation-turned-monkeys-into-humans/news-story/2517752c8e3d577547cf6db91cb8d7f0], [http://www.theguardian.com/sport/2016/feb/15/im-saying-we-started-from-aliens-shane-warne-casts-doubt-on-evolution], [http://metro.co.uk/2016/02/15/aliens-turned-monkeys-into-people-shane-warne-doesnt-believe-in-evolution-5682522/] (all available 7/3/2016). Interestingly, and upholding and reinforcing the misconception, embedded in the graphic, the metro.uk site provides the Ladder of Progress icon as a backdrop within its main image.

Judeo-Christian Religious Indoctrination

While many religious (and secular) doctrines have played a role in shaping opinions about humanity's position in the natural world, in Western thought, in particular, Judeo-Christianity's influence has been significant.

Writing more than forty-five years ago, and in the context of broader environmental issues, White (1967:1205) commented, '[e]specially in its Western form, Christianity is the most anthropocentric religion the world has ever seen'. Although White's primary focus was on the role of technology in environmental change, he argued that certain aspects of Christian philosophy underpinned the growing exploitation of nature through the use of technologies from at least the invention of the strip plow in northern Europe in the 7th century: standing in unambiguous contrast to ancient paganism, Christianity created a 'man'/nature dualism, where nature was created for the purpose of being exploited by 'man', who was not merely a part of nature but created in God's (who transcends nature) image; Judeo-Christian teleology, is driven by an in-built trust in endless linear progress, which is, if interpreted as being material in nature/character, ultimately unachievable without exploitation [and a final goal of perfection]; the denial and replacing of earlier, animistic paganism, in which every part of nature had its own *genius loci* or guardian spirit, thus allowing for guilt-free use at will of a 'soul-less' nature.

Similarly, Sorabji (1995:8) expresses his thoughts on the enmeshing of particular classic Greek philosophy and the developing Judeo-Christian tradition, and the consequences for dominant attitudes toward animals in the West over the ensuing centuries:

> The Aristotelian and Stoic denial of rationality to animals proved all too congenial to Jews and Christians. It was opposed chiefly in the Pythagorean and Platonist traditions, by the Cynics and by those free-thinking Aristotelians who did not go along with their master. The Christians were not the first to take an anti-animal view, but they exploited the anti-animal views they found in the Stoics. And…we are heirs of a Western Christian tradition which selected just one side from a much more wide-ranging Greek debate.

However, some writers (for example, Preece and Fraser, 2000) point out that it is more a matter of interpretation of Biblical pronouncements and that there is not a uniform ethic to arise from them. Citing directly from Genesis, Linzey (2008:286)

points to two contrasting passages (Genesis 1 and Genesis 9) and argues that they were written by two different groups of people with differing values to meat eating.

> 'And God said, 'Behold, I have given you every plant yielding seed which is upon the face of all the earth, and every tree with seed in its fruit; you shall have them for food. And to every beast of the earth, and every bird in the air, and to everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food.' (Gen. 1:29-30; RSV)

> 'And God blessed Noah and his sons, and said to them '…Every moving thing that lives shall be food for you; as I gave you the green plants, I give you everything.' (Gen. 9:1-4: RSV)

While the first passage from Genesis seemingly draws a line only between the biological kingdom Animalia and the rest of the four kingdoms – Plantae, Fungi, Protista and Monera (Whittaker and Margulis 1978) – the second passage draws a clear line between humans and every other being, including plants.

In keeping with the notion of the pervasion or embedding of ideas across time and distance, echoes of each of these quotations can be recognised in the words of Aristotle (as quoted in Van De Veer and Pierce, 1998:31),

> '[P]lants exist for the sake of animals…All other animals exist for the sake of man, tame animals for the use he can make of them as well as for the food they provide; and as for the wild animals most though not all of these can be used for food or are useful in other ways; clothing and instruments can be made out of them. If we are right in believing that nature makes nothing without some end in view, nothing to no purpose, it must be that nature has made all things specifically for the sake of man.'

Centuries later, in his *Summa Theologica* [1265-1274], a work founded on a marriage of theology and classical philosophy, St Thomas Aquinas' words (quoted in Marshall, 1994:109) show a strong resonance with those of Genesis and Aristotle,

> 'There is no sin in using a thing for the purpose for which it is. Now the order of things is such that the imperfect are for the perfect…things, like plants which merely have life, are all alike for animals, and all animals are for man. Wherefore it is not unlawful if men use plants for the good of animals, and animals for the good of man, as the Philosopher [Aristotle] states [*Politics,* I, 3].'

It is possible to trace the same underlying values or philosophical underpinnings expressed by influential thinkers across time and various schools of thought: ideas taken as truths, greatly unchallenged and built upon with each successive generation to the extent that they become the dominant, majority understandings and those who would think differently are forced to defend their minority stances.

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While classical and religious thought might have laid much of the groundwork for the perceiving of humans as superior to the rest of the natural world, scientific reductionism, particularly Enlightenment science, was unequivocally to affirm a separation, its voice of authority and rationality celebrating human intellectual capacities (already culturally established as being unique) and 'confirming' human status as exceptional.

A Legacy Of Science -

As Pepper (1996:129) notes, the "'paradigm' for science was set by religion". The previous section demonstrated the manner in which old ideas/concepts 'flow forward' in time and how old notions become foundations or 'cornerstones'[18] for much supposed new thinking. In the hierarchical structures of universities in the Middle Ages, the Faculties of Theology were the senior ones. It was an imperative that the Aristotelian tradition of scientific philosophy conform to Christian theology and, as such, any challenge to its methods and principles would have meant a challenge to the fundamentals of the theology around which it was based and, therefore, to the widespread values of society of the era. This meant that mediaeval science and broader world views were, and remained, centred on anthropocentric interpretations of what was deemed to be God's plan for humans and His purpose for the universe (Pepper, 1996:129).

The Renaissance, from around the middle of the 14th to the end of the 15th century, saw enormous, and progressive, changes in the arts and sciences. However, underpinning much of the new re-visioning of the world was still the old, underlying concept of human superiority and a human-nature divide. Indeed, the new 'modern' scientific thought was to drive the wedge between the two deeper than science had ever done before.

During the early 17th century William Harvey [1578-1657], a vitalist, became the first to conduct systematic experiments on live animals since the Roman physician, Galen, and was to discover the system of blood circulation and, thus, the beginnings of modern medicine (Guerrini, 2011:122). The mechanists, an approach introduced

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[18] The use of these construction terms seems appropriate as they both represent parts of the building that are foundational elements of the completed structure and yet are either rarely seen again or are frequently overlooked in day to day observations, and, as buildings have bases so, too, do ideas.

by a younger contemporary, Descartes [1596-1650], adopted Harvey's methods, resulting in greater numbers of nonhumans being used for experimentation.

In Descartes' reductionist paradigm, both animals as well as human bodies were nothing more than machines/automata, the workings of both could be reduced to physical and chemical systems, understood through mathematics. The real, true thing that separated humans from the rest of nature/animals was the mind and the ability to think – an ability not awarded to animals. Descartes reasoned that the mind could reside in a realm beyond the physical and needed no body to continue to exist,

> But then , immediately as I strove to think of everything as false, I realised that, in the very act of thinking everything false, I was aware of myself as something real; and observing that the truth: *I think therefore I am*, was so firm and so assured that the most extravagant arguments of the sceptics were incapable of shaking it…I concluded that I was a substance whose whole essence or nature consists in thinking, and whose existence depends neither on its location in space nor on any material thing. Thus the self, or rather the soul, by which I am what I am, is entirely distinct from the body, is indeed easier to know than the body, and would not cease to be what it is, even if there were no body (Descartes, *Discourse on Method*, 1637, cited in Pepper, 1996:141)

Descartes's mind/body, mind/matter, dualism was to have far reaching and profound effects and this *Cartesian dualism* was to create an abyss between humans and other animals. However, he was not alone in embedding principles that were to entrench the $\frac{Human}{Nature}$ binary. Francis Bacon [1561-1626], for example, in overturning previous suspicious attitudes toward science and scientific practices, and establishing their benefit to humans, concomitantly established the rationale for the need and the right to conquer nature: to control and subsume all its bounty (living and nonliving) for human benefit (Marshall, 1994:183).

While the mechanist philosophy was all but superseded by the 18th century, with broad recognition that animals are not machines and do feel pain, animal experimentation continued – and does so to the present time, with Cartesian dualism evident in the methods and philosophical approaches of many scientists working in numerous different fields, including natural and behavioural sciences (Donnelly, 1999; Potts, 2010).

Thus far sections 2.1, 2.2 and 2.3 have provided insights into the complexities of human attitudes to nonhuman animals from an historical perspective, and also into

key factors at play in senses of human connectedness with/disconnectedness from nonhumans. Biological/co-evolutionary processes including biophilia, biosynergy, or biochemical (such as the neurotransmitter oxytocin, which drives the urge for social connection) offer fundamental explanations for deeper senses of connection.

Across time, key philosophic influences– Classic philosophy, Judeo-Christian religious indoctrination and Enlightenment science – have enmeshed, and to the greatest degree, synergised, to become a powerful force in directing how most humans (in Western societies at least) have come to value nonhuman nature/nonhuman animals and perceive them as resource, subordinate, separate and other. As such, they have been highly influential in creating the perception of disconnection.

The following sections (2.4 and 2.5) offer additional context to the study. The former provides an overview of the types of natural disasters that occur in Australia as an indication of their possible extent and severity. The latter sheds light on the significant numbers of nonhumans that can be potentially impacted during disasters.

2.4 An overview of recent major natural disaster events in Australia

'Extreme weather events dominated the 2012/2013 Australian summer, including record-breaking heat, severe bushfires, extreme rainfall and damaging flooding. Extreme heatwaves and catastrophic bushfire conditions during the Angry Summer were made worse by climate change.' (Steffen 2013)

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'A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of extreme weather and climate events, and can result in unprecedented extreme weather and climate events' (Intergovernmental Panel on Climate Change 2012:5).

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There has been general scientific consensus that the phenomenon of global climate destabilisation [more popularly referred to as global climate change or global warming] is occurring and that, in addition to natural climate variability, observed

changes reflect the influence of human induced changes (Intergovernmental Panel on Climate Change 2014, 2012).Taking a conservative approach in their reports, the IPCC indicate that with continuing climate change, while there will be 'regional and subregional variations (2012:6), it is likely to very likely that there will be increases (in intensity, frequency or duration) in more extreme weather events such as droughts and heavy precipitation.

Prolonged extreme weather events can, in turn, lead to major bushfire (or wildfire) and flooding events, respectively (although destructive bushfires can still occur in non-drought periods). Even in low to zero human populated areas, damage to wildlife and ecosystems can be devastating. The situation becomes increasingly more disastrous if these events affect towns, cities or areas devoted to animal husbandry and farming – not only because of human injury and loss of life but also because of the increased numbers of confined and vulnerable animals. Population growth and urban sprawl that encroaches into vulnerable areas significantly add to the dimensions of a disaster event.

While the boundary sometimes blurs, disaster events can be thought of as either human induced (anthropogenic) or natural disasters. Such events as toxic spills, deliberately lit fires, faulty engineering causing a disaster as in a bridge collapse, rail disasters, certain disease outbreaks, even extinction events and other, long term events such as desertification or global warming could be classed as human induced disasters or hazards. Natural disasters include such events as earthquakes, bushfires lit by natural forces (lightning for example), floods, cyclones, heat waves, tsunamis; in other words, those events not initiated through direct human action.

Similarly, and again with the potential for boundary blurring, disaster events can be categorised as being rapid onset or slow onset events. The type of event obviously has subsequent implications for the ways in which communities and individuals (human and nonhuman) will be impacted and for management strategies or amelioration processes.

 The following table (Table 2) provides an insight into some of the more recent major disasters that have occurred in Australia. These disasters were classified as rapid onset events and brief notes are included here on each event to provide some context.

Disaster Type (Australian)	Examples and Notes
Earthquake	Newcastle, New South Wales, 1989 – registered 5.6 on Richter magnitude scale, 13 people died and at least 150 injured, effects felt over 200 000 square kilometres, 50 000 buildings damaged, AU$4 billion (current rate) in damages, nonhuman animal deaths/injuries unknown
Cyclone	Cyclone Tracy, Darwin, Northern Territory, 1974, 237km/h, compact system – radius of gales less than 50km (cf. Cyclone Tip – radius of gales over 1100km), no storm surge, destroyed over 70% of Darwin's buildings, 41K out of 47K people left homeless, 71reported dead, over AU$6.4 in damages (2014 rate), nonhuman animal deaths/injuries unknown
Fire	- Canberra, New South Wales, 2003, four dead, over 490 injured, around 500 homes destroyed, pyro-tornadogenesis event[19] – very intense, very unpredictable and extremely rapid event, about 70% of Australian Capital Territory's pasture lands and reserves/parks severely affected, around AU$330million at 2003 rates, final nonhuman animal deaths/injuries unknown

[19] McRae, Sharples *et al*, 2013, 'An Australian pyro-tornadogenesis event', *Natural Hazards*, Vol 65, No. 3, pp1801-1811

- Eyre Peninsula, South Australia, Wangary Bushfire, 2005, nine deaths, over 110 injured, major property damage – over 780 square km and a significant portion of SA's wheat belt, internal fire temps over 1000deg C and winds over 100kph, 47 000 stock losses, final nonhuman animal deaths/injuries unknown

- Victoria, Black Saturday, 2009, still considered to be Australia's worst bushfire, as many as 400 individual fires, 78 townships affected, 70 national parks and reserves, 3,550 agricultural properties, over 7.5 thousand people displaced, 173 deaths, over 400 injured, final nonhuman animal deaths/injuries unknown

- Sampson Flat, South Australia[20], 2014/2015 summer, destroyed a number of homes, over 11 000 hectares of bush and farmland, no human lives lost, many nonhumans perished, were euthanased or injured – one particularly tragic incident occurred at Tea Tree Gully Boarding Kennel and Cattery[21], where over 40 of

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[20] See, for example, *SOTT*, Signs of the Times, Earth Changes, 'South Australia faces worst wildfires since 1983', available online https://www.sott.net/article/290873-South-Australia-face-worst-wildfires-since-1983
[21] See, for example, , Sam Kelton, *Sunday Mail*, 'Dozens of pets perish as Tea Tree Gully Boarding Kennel and Cattery hit by Adelaide Hills bushfire, http://www.adelaidenow.com.au/news/south-australia/dozens-of-pets-perish-as-tea-tree-gully-boarding-kennel-and-cattery-hit-by-adelaide-hills-bushfire/news-story/92be51251fdad2d2f65d1f752f69d238 , available online 6/1/2015. This article also highlights the compassion and empathetic responses that emergency service and fire service

	the trapped boarders perished (a number of dogs and all of the cats), final nonhuman deaths/injuries unknown
Flood	Brisbane and Queensland, 2010-2011, 35 people died, 78% of state declared a disaster zone, significant impacts on wildlife and biodiversity (land and marine – unprecedented mortality rates for green turtles and dugong), extreme flash flooding in Lockyer Valley, over 200 000 people affected, around 12 000 people accommodated in Red Cross evacuation centres, insured costs exceeding AU$2.5 billion, final nonhuman deaths/injuries unknown[22]

Table 2 Examples of major Australian rapid onset disaster events (Source: [unless otherwise indicated] Australian Government, 2015[23])

Mixed blessings for some nonhumans after Cyclone Tracy

While details of the outcomes for most nonhumans affected during Cyclone Tracy are largely unknown, some incidents were recorded. Les Liddell (Good 1994on line) recounts an incident in which a young girl had secreted a dog on board an evacuation flight in a basket and her tears when the dog was taken away from her[24]. In another incident, Liddell describes a happier account about a DC3 aircraft which landed at Tennant Creek. The pilot had radioed ahead requesting some milk for himself and

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personnel demonstrate when rescuing nonhumans from disaster situations, and a demonstration of connectedness.

[22] van den Honert and McAneney, 2011, 'The 2011 Brisbane Floods: causes, Impacts and Implications, *Water*, vol 3, no. 4, pp1149-1173
[23] Australian Government, 2015, *Australian Story*, 'Natural Disasters in Australia', available online http://www.australia.gov.au/about-australia/australian-story/natural-disasters
[24] Three decades later a similar scenario, occurring in New Orleans after Cyclone Katrina, 2005, was to receive worldwide media attention and was to contribute to changes in state and federal law in the US, resulting in the introduction of the PETS Act 2006 (Baum 2011). This incident will be expanded on in Chapter 3, Literature Review.

some water for his passengers. When Les arrived at the craft, and no passengers alighted, the pilot invited him to board to have a look at the 'passengers'.

(Text has been removed due to copyright restrictions)

As will become clear in Chapter 7of this thesis (page 212), the animals on this rescue flight were at least afforded the opportunity of a future, unlike many others whose lives were deliberately cut short in this event.

The above section (2.4) has offered background material about various types of natural disasters that have occurred in Australia. The following section will provide certain contextual information on nonhuman animal numbers and spatial distribution within Australia.

2.5 Companion and other domesticated animals in Australia – some statistics

2.5.1 Companion Animals

In their 2010 report, the Australian Companion Animal Council (ACAC) noted that Australia has one of the highest rates of companion ownership in the world, with 36% owning dogs and 23% owning cats (ahead of the UK but behind the US, with 23% dogs and 20% cats and 40% dogs and 33% cats, respectively, for the same time period). In numbers, around 33 million 'pets' resided in slightly in excess of 8 million households. More specifically, in relation to dogs and cats, in 2009 there were 3.41 million dogs and 2.35 million cats, averaging 16 dogs and 11 cats for every one hundred people in Australia (Australian Companion Animal Council 2010). The RSPCA (2013) lists the combined (all 'pet' types) figure for households with 'pets' in 2005 as 68%.

Comparing the maps in Figures 4 and 5, below, it can readily be seen that there is a strong correlation between the areas of highest population densities in Australia and those areas most susceptible to natural disasters. According to the Australian Bureau of Statistics [ABS] (Australian Bureau of Statistics 2012), as at June, 2010, around 85% of the Australian population lived within 50 kilometres of the coastline, falling within the zone most vulnerable to various disasters. Given the above Australian statistics for companion animal ownership, it is reasonable to assume that a highly significant portion of the millions of them will also reside in the most disaster vulnerable areas of the country.

(Figure 4 has been removed due to copyright restrictions)

Figure 4 Geographic distribution of the Australian population, 2012 (Source: Australian Bureau of Statistics [ABS] Year Book Australia, 2012, available online 2/3/2106, http://www.abs.gov.au/ausstats/abs

(Figure 5 has been removed due to copyright restrictions)

Figure 5 Natural Perils in Australia - Natural Hazards Potential (Source: Natural Hazards Research Centre, 2000, available 2/3/2016 online http://www.es.mq.edu.au/NHRC/)

2.5.2 Agricultural/farm animals

The birth of farming, as we know it today, started from very humble beginnings. Three months after the arrival of the 'first fleet' in January 1788, the livestock in the colony consisted of seven horses, seven cattle, 29 sheep, 74 pigs, five rabbits[25], 18 turkeys, 29 geese, 35 ducks and 209 fowls (Australian Bureau of Statistics 2012).

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The ABS, in its 2013 statistics on agricultural animal numbers in the meat industry, lists the following nonhumans as 'livestock slaughtered' (in keeping with their status as commodities) and provides the following breakdown (Table 3):

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[25] While efforts were obviously made to ensure the safe passage of these few rabbits, seemingly considered of some value in order to warrant their exportation, with the passage of time the value of their progeny has diminished to the point that they are now classed as pests and subjected to eradication programs.

Livestock Slaughtered, Australia, Oct 2013	
Cattle (excluding calves)	775 981
Calves	63 316
Sheep	962 363
Lambs	2 072 176
Pigs	389 390

Table 3 Livestock Slaughtered in Australia, 2013 (Source: Adapted from Australian Bureau of Statistics, 2013, 'Livestock and Meat Australia, October 2013, available 9/1/2014, online http://www.abs.gov.au/ausstats)

The above figures provide some insight into numbers of animals committed to the meat industry, but do not include numbers of animals utilised in the dairy industry or those sacrificed in the live trade market. Giving some indication of these numbers, and according to Meat & Livestock Australia (MLA), in excess of 4 million sheep and almost 600 000 cattle were exported live in 2005 (Meat & Livestock Australia 2006), while Dairy Australia offers a figure of in excess of 2 million cows laboring in the dairy industry (Dairy Australia 2014). Figure 6, below, shows that Australia's dairy farms are all situated within areas that are most vulnerable to disaster events (Fig 5, above).

(Figure 6 has been removed due to copyright restrictions)

Figure 6 Dairy farming areas in Australia (Source: Diary Australia, 'Dairy Autralia: Your levy at work 2014',available online 13/1/2014 http://www.dairyaustralia.com.au/Statistics-and-markets/Farm-facts/Cows-and-Farms.aspx)

Whilst this study largely explores the participants' experiences with companion animals during disasters, it should not be forgotten that these events affect considerably more types of nonhuman beings. Extrapolating from the above statistics, which do not include data on horses, alpacas and other domesticates (nor zoo or laboratory animals - or, indeed, wildlife), it is clear that large numbers of animals that are restricted or confined in some way are among some of the most vulnerable in disaster events.

Summary

This chapter has provided context for the current study, which explores human/nonhuman relationships in times of natural disaster. This has been achieved through a consideration of two particular areas. Firstly, the key historical intellectual

influences which led to current embedded binaries, that posit humans as separate from and superior to other, nonhuman animals, have been outlined. Secondly, an overview of disaster types in Australia, and the numbers and potential impacts on nonhumans, has been offered.

The next chapter (3/Literature Review) explores the literature that has been centered on various aspects of human-nonhuman relationships in times of disaster: from the more experiential issues that arise at these times (for example, disaster management issues) through to the impacts of disasters on the emotional bond/connections that can form between humans and nonhumans and various associated consequences for both.

3. LITERATURE REVIEW

3.1 Human-Nonhuman relationships in times of disaster

Reflecting the prevailing hierarchical valuing of animals (see, for example, Irvine, 2009), in Western society, in particular, the literature on human-nonhuman relationships in times of disaster is to the largest degree centered on companion animals and their Person/s in Care (PICs). It is also primarily sourced from the United States, New Zealand and Australia. Indeed, Garde, Perez *et al* (2013:1073) note that, despite the majority of natural disasters occurring in low and middle income countries, less than 1% of the literature is initiated from them.

Several common themes and issues emerge in this literature, including *inter alia*: the under-estimation of the strength and value of the human-companion animal bond (particularly its role in contributing to human resiliency in times of disaster or disaster recovery); inadequate emergency management plans on the part of agencies and individuals; inadequate or under/un-coordinated emergency management policies between regions, between states or territories and between governments (local and federal) and between each of the respective tiers; inconsistencies in, and frequently paradoxical aspects of, animal welfare law (highlighted when comparing times of disaster to times of non-disaster); evacuation failures or emergency service rescue and management complications due to refusals to evacuate because owners refuse to leave their animals (or they risk their own lives, the lives of their animals or emergency service personnel by returning to restricted areas before it is declared safe to do so). A number of such points will be expanded on in the following sections of this chapter, including those from current literature on the experiences of people and their animals in several international disaster events. Insights into the varying types of experiences in past disasters, and the associated responses to them, afford an opportunity to understand the drivers that have shaped them, such as the valuing of human-nonhuman bonds or the valuing of nonhumans, themselves. This, in turn, has the potential to lead to a paradigm shift (from more anthropocentric to more biocentric) and the development of more holistic prevention and amelioration strategies used in disasters.

3.1.1 New Zealand

On the 4th of September, 2010 the Canterbury region of New Zealand was struck by a major earthquake. This was followed by numerous aftershocks and another major quake was experienced by the region on the 22nd of February 2011(Glassey 2011).

As is the case in Australia, New Zealand also has a high rate of pet ownership. Indeed, Evans (2013:7) notes that 68% of households in New Zealand own a pet, a rate equalling Australia's. A conservative estimate of household numbers affected by the two major quakes and the many aftershocks comes from Statistics New Zealand (2014) who list 'stickered' property numbers, as at 23rd of June, 2011, in the various key zones identified according to level of damage: 5 000 in the red zone (not feasible to rebuild at that time); 10 000 in the orange zone (further investigation required); 100 000 in the green zone (could be repaired). There was also a white zone which, at the above date, was still being mapped. Extrapolation, then, reasonably suggests that a significant number of animals would have been affected, to some extent, by the quakes. Indeed, several thousand nonhumans perished as a direct result of the quakes. This figure chiefly comprised those that were trapped in intensive chicken farming (factory farming) but many other companion, dairy and farm animals became lost, injured or distressed (Glassey, 2011; Potts and Gadenne, 2014). Glassey (2011) notes how such consequences for the nonhumans were associated with evacuation failure and endangering behaviours when there were clashes, or co-operation issues between PICs and emergency service operations.

Animal welfare and the Canterbury quakes

Glassey (2011:50) describes the 'dispersed accountability model'(Norton's) used by New Zealand's Civil Defence Emergency Management (CDEM), which places the emphasis for management at community level through local government as opposed to a top down 'command and control' system. Regional CDEM groups each develop their own management plans, in which local authorities are, along with the Society for the Prevention of Cruelty to Animals (SPCA), responsible for considering and catering for companion animals during disaster situations. Fundamentally, however, all animal owners are responsible for providing for their animals' welfare, under the Animal Welfare Act 1999, at all times (during times of emergency and not). There are currently no statutory requirements stipulating that CDEM groups must ensure

that animals are included in all disaster management plans (Evans 2011; Evans & Perez-y-Perez 2013 ; Glassey 2011).

Aside from any ethical or animal rights issues that arise from inadequate planning for animals in emergency management, other complications were exposed during the Canterbury quake crisis. Also noted by the above cited authors, 'built in' to the evacuation planning process, under current model, and due to inappropriate/inadequate co-ordination between groups, is the basis for confusion and misinterpretation. For example, some agencies were unsure about service animals, such as hearing dogs and (along with other, companion animals) these were refused from evacuation operations or emergency accommodation, leaving their owners (who were dependant on their nonhumans) with a practical, as well as a moral, dilemma.

Despite SPCA inspectors having the power (under the New Zealand Animal Welfare Act 1999) to access cordoned areas they were refused (by defence and police personnel) in some instances, highlighting 'the lack of legislative knowledge by officials which needs to be addressed' (Glassey 2011:56). Additionally, as Glassey (p53) points out, the welfare centres established in the affected areas by the Territorial Authorities were unprepared and under-resourced to cope with the numbers of people with animals requiring assistance – in itself reflecting the lack of significance placed on the human-animal relationship (and possibly a lack of awareness of nonhuman numbers in the community). Beyond this, finding rental accommodation with an animal also became a key stressor as demand for 'pet' friendly accommodation outstripped supply.

While some people simply refused to leave without their animals (in turn, creating a new set of issues to be dealt with by authorities), some were forced to evacuate without their animals, leaving them behind to fend for themselves (and in many cases they escaped and became lost). This situation, in turn, reveals a central paradox: incongruently, if a person is forced to evacuate and their animal is refused from the evacuation process, and yet the PIC is responsible for that animal's welfare and safety at all times, under the Animal Welfare Act (1999), the situation becomes nigh on impossible for the PIC (the situation is the same in Australia). Not only is it

stressful and confusing for the nonhuman, it makes an already stressful situation for the PIC even more traumatic and impacts on personal and community disaster resilience and personal recovery time.

Following the Canterbury quakes, the disaster management system to which Glassey (2011) was referring (and as described above) underwent a review in 2015. The updated information can be viewed on the website for the Ministry for Primary Industry (MPI)[26] . While lessons were learned from these quakes regarding the needs of animals in disasters, the wording on the websites demonstrates that the dominant paradigm for considering the needs of nonhumans in disasters (still from an 'animal management/animal welfare' perspective) continues to be that which demonstrates the socioculturally entrenched hierarchical division between humans and animals (that is, the human/nature binary [$\frac{Human}{Nature}$]). For example, in the 'Protection and response: Animals in emergencies' section (as per footnote #26), the language is still couched in that of conventional expressions like 'your family and your animals'. A softening (as a precursor to deeper change) of such a distinction could be achieved through such wording as 'you and your nonhuman family members'. Similarly, in Section 14 Welfare Services, 14.14 'Animal welfare sub-function'[27] the use of the term 'animal owners' continues to embed the largely unchallenged concept of animals as property.

The Canterbury quakes and the breaking of bonds: a word on grief
Writing from a social work practice and research perspective in the context of the Canterbury quakes, Evans and Perez-y-Perez (2013) and Evans (2011) discuss the importance of the connection of human-nonhuman bonds to human recovery from, and resilience to, disaster events: the positive role that the bond can play in trauma reduction, 'normalising' life by providing both focus and continuity through maintaining the 'ordinary' daily routines of caring for the animal and through the reciprocal/shared emotional support that the PIC and their animal can provide each other. They argue that the Canterbury quakes exposed a need for post-disaster social

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[26] Ministry for Primary Industries [MPI], New Zealand Government, 'Protection and response: Animals in emergencies', available on line, https://www.mpi.govt.nz/protection-and-response/animal-welfare/animals-in-emergencies/ , 29/7/2018

[27] Ministry for Civil Defense and Emergency, New Zealand Government, '14.14 Animal Welfare sub-function', available on line https://www.civildefence.govt.nz/assets/Uploads/RevisedGuide/Guide-Section-14-Welfare-services.pdf , 29/7/2018

work assessments and interventions to be more in tune with the special considerations and needs that are implicit within human-nonhuman relationships. Also, and importantly, as also discussed by Morley and Fook (2005), Evans and Perez-y-Perez (2013:11) point out that the human-human bond has been the normative measure for judging the ability to form, and the quality of, relationships/bonds and subsequently, and implicitly, the human-nonhuman bond has been deemed, not only inferior but has also been trivialised and pathologised. This, in turn, has had enormous implications for both, PICs and their animals, particularly importantly in terms of law and policy affecting the rights and welfare of nonhumans, which frequently minimize or even ignore these needs[28].

However, legal issues aside, because the human-nonhuman bond is judged to be inferior to the human-human bond, the depths of the bond can be grossly underestimated (or ignored) and the consequences of this impacts on numerous other societal aspects for PICs. When a companion animal dies the owner's grief can be as deeply felt, complicated or prolonged as that felt when a significant human dies (Doka 1989; Weisman 1990; Stephens and Hill 1996; Doka 1999; Morley and Fook 2005; Barton Ross 2007). Yet the usual social services and systems, including compassionate leave or even support groups, that are in place to guide and assist someone grieving human loss are not there for those grieving the loss of an animal, despite the grieving process being the same. Morley and Fook (2005:133) cite Stewart (1985)[29] as noting,

> 'The mourning rituals surrounding the loss of a human loved one often encourage the expression of grief…pet loss does not initiate similar mourning rituals. Consequently, the bereaved pet owner generally must work out their feelings in isolation and without a support system.'

Morley and Fook (2005:131) also add, 'loss of a companion animal results in severe unstabling [*sic*] of the owner's entire domestic relationships'… In times of a disaster event it is quite clear that life is already destabilised. Adding the loss of a companion animal (including non-death loss) to the situation will inevitably add to the trauma and compound the grief experienced.

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[28] The tenuousness of the social construction of boundaries between humans and other animals will be expanded on later in *Animals as Family[AFA]*, page 156

[29] Stewart C, Thrush J, Paulus G & Hafner P,(1985). The elderly's adjustment to the loss of a companion animal: People-pet dependency. *Death Studies*, 9, 383-393

Doka (1989; 1999), who coined the term *disenfranchised grief* to describe denied or non-acknowledged (by society) grief (including companion animal loss) points out the paradox or positive feedback loop of this type of grief: the grief is not generally recognised by society and social supports are missing, which can lead to an intensifying of feelings leading to a greater need for support. The grief process can be complicated by the fact that many are too embarrassed, due to entrenched social values and perceptions (Bento 1994; Stephens and Hill 1996) to acknowledge the grief (even possibly to themselves and thus further, self-disenfranchising their own grief) and to even ask for help with it.

Weisman (1990:241) exposes a life/death irony in 'pet ownership' when he writes, '[w]hile pet ownership is praised and its virtues celebrated, corresponding grief is often trivialised and not recognised as truly significant'. Thus, while having a companion animal in one's life is broadly socially acceptable, having a meaningful bond with the animal and then grieving its loss is more generally considered to be insignificant, unacknowledged or even considered inappropriate in some way.

The implications for the physical and emotional health of the grieving PIC, however, are *not* insignificant and, in turn, impact beyond the personal level to the social and community levels in various, often subtle and insidious, ways, including, *inter alia*: economic costs of under-functioning staff; economic costs of greater demand on medical and psychological services; emotional costs (and sometimes financial in the case of partnership breakdowns) of fragmenting relationships and the costs of breakdown in group/community social cohesion (Bento 1994).

It becomes clear, then, that companion animal[30] loss during a disaster adds another, weighty, dimension to the suite of factors that must be dealt with, by individuals and communities. Indeed, a study by Lowe, Rhodes, Zwiebach and Chan (2009) of survivors of Hurricanes Rita and Katrina pointed to the compounding of the grief of 'pet' loss with the trauma of a disaster as contributing to 'post disaster declines in psychosocial functioning'(pg. 246). As with all impacted by a disaster event, PICs have to deal with the practicalities that arise, potentially including such things as disruption to daily routines, loss of possessions or property, loss of employment,

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[30] Or, indeed, any nonhuman with whom there is a connection or bond.

necessity to find alternative accommodation, relationship disruptions and even possibly serious injury or death of family members or friends. Add to this any fracture in their relationship with their animal and compound it further with the fact that their grief process will be impinged upon and limited by societal expectations and the burdens and stressors of a disaster event become even greater. 'Pet' loss is already generally deemed as an insignificant loss and the associated grief is disenfranchised. When this loss is situated within a disaster which impacts on others as well, especially if there is human loss of life or serious injury, and major property loss, the grief felt at the loss of an animal can be disenfranchised even further - even by the PICs themselves, who may feel too guilty to 'indulge' in their grief in the face of imposed expectations.

The Canterbury quakes: other issues
Several other key points arise from the literature on the Canterbury quakes. Glassey (2011) recommends a lead agency approach in the management of companion animal welfare and emergency planning (rather than over-reliance on, often underfunded, not-for-profits/charity organisations) and in the management of lost and found animals and 'pet/owner reunification' (rather than ad hoc, dispersed and uncoordinated independent efforts). Also required is specific updated and inclusive animal welfare emergency legislation with more integration between the Animal Welfare Act 1999 and the Civil Defence Emergency Management Act 2002, which currently outlines powers to evacuate and preserve human life and makes no provision for animals. Consultation and co-operation/collaboration between stakeholders – policy makers, civil defence and emergency management, animal welfare organisations, veterinary professionals and PICs and farmers – is required to understand all the facets of the issue of animal welfare in times of emergency/disaster. Evans (2011) and Evans and Perez-y-Perez (2013) acknowledge the multifariousness of the issue and the dearth of evidence-based study that is available to help PICs who have lost or have had to relinquish their animals (or who are having to cope with dramatic changes in their animal's behaviour) as a consequence of disaster events, and to assist support practitioners who will need to work with the PICs.

Aside from the limited number of examples offered by Glassey (2011) and Evans and Perez-y-Perez (2013), and the 2014 study by Potts and Gadenne, what largely appears to be missing thus far in the New Zealand disaster literature (and, indeed, the Australian literature) are more expansive academic explorations of personal accounts of disaster experiences of PICs, necessary for a greater understanding of the issues faced in such extraordinary circumstances (by both the PICs and their animals). The field of human-nonhuman relationships in disasters, for the most part, remains a relatively under-researched one in Australasia, particularly when a comparison is made with the output of academic articles on the topic from the United States.

3.1.2 The United States

The United States frequently endures major meteorological events. 2005 saw three of the six most intense hurricanes recorded in US history: Wilma, Rita and Katrina, which was the most destructive (causing triple the damage of the previous most destructive hurricane, Andrew in 1992) and resulted in the most loss of life. Figures for human deaths from Katrina vary. Brunkard, Namulanda and Ratard (2008) provide a range of 970-1450 deaths, although some higher figures can found on various online sites. The Louisiana SPCA[31] (2016, on line) writes that over 15 500 animals were rescued but that, while exact numbers are unknown, companion animal deaths are estimated to be in the tens of thousands. Irvine (2009:2) notes that 'millions of farm animals died'[32].

An estimated 400 000 plus people were displaced due to Hurricane Katrina (which struck New Orleans on the 29th of August, 2005), and the associated storm surges (Geaghan 2011). Lowe *et al* (2009:244) and Baum (2011:105) provide approximations of 200 000 and 250 000, respectively, of companion animals being displaced. Irvine (2009:34) suggests a figure closer to 730 000 and Representative Christopher Shays, co-sponsor of the PETS Act 2006, offered the comment that 'estimates are that some 600 000 animals either died or were left without shelter' (Baum 2011:106). Lowe *et al* (2009:244) note that of those companion animals

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[31] Louisiana SPCA, 2016, 'Hurricane Katrina', available on line (https://www.la-spca.org/katrina)
[32] At the time of writing there have been two further significant Hurricane events (August/September, 2017). On line sites provide some insight through imagery and reporting although much is still anecdotal. It would seem that the response to animals' safety and evacuation was a more concerted response than that of Katrina's. There were, however, according to a number of sites, still animals being left behind and vulnerable. Footnote #42 provides links to some of these accounts.

rescued fewer than 5% were re-united with their owners. Irvine (2006:1) observes that animal welfare organisations tended some 10 000 companion animals affected by Katrina. Blending these sources it becomes obvious that an estimation for animal deaths (whether due directly to the hurricane, starvation/dehydration/disease or to being intentionally put to death) in the thousands is entirely probable, even given that large numbers may have been left to roam.

Katrina, the media and the 'Snowball' effect

Other disaster events have led to the deaths of substantial numbers of animals in the US. Following Hurricane Andrew in 1992 over 1000 healthy companion animals were euthanized because there was not enough shelter spaces to house them. In the 1997 blizzard in Colorado thirty thousand cattle died (Irvine 2006:1). Nearly three million animals died during Hurricane Floyd in 1999. Some were companion animals but most were hogs confined in 'concentrated animal feeding operations' (Irvine 2009:8). However, the extent of the media coverage of Hurricane Katrina brought the issue of animals in disasters to the general public's attention in an unprecedented way and one particular story was to have telling repercussions. Indeed, some of the news articles on this story are included here in the literature review section as they played a significant role in drawing attention to the issue and led, through this, to academic articles being written on the topic (as will be discussed below).

On the 1st of September, journalist, Mary Foster (2005) of the Associated Press, on the topic of refugees being evacuated from the increasingly unsafe Superdome in New Orleans, wrote the words,

> **(Text has been removed due to copyright restrictions)…**and when a police officer confiscated a little boy's dog, the child cried until he vomited. "Snowball, Snowball," he cried.'[33]

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[33] Mary Foster, ASSOCIATED PRESS, 3:27 p.m. September 1, 2005, *Superdome evacuations enter second day, refugees getting showers and meals in Houston*, http://legacy.utsandiego.com/news/nation/20050901-1527-katrina-superdomeevacuation.html available online 17/2/2014

Versions of this scenario were to appear in numerous other media reports. Five days after the Foster article, the following words were to appear on NBCNews.com (2005),

(Text has been removed due to copyright restrictions)

As far forward as 2012, the incident was still being referenced. Coren (2012) wrote,

(Text has been removed due to copyright restrictions)

Reviewing the 'Snowball' incident's wide recounting it becomes clear that two short sentences, in the larger, original piece on refugees, generally, captured people's imagination through a combination of factors: pathos was created through the language used and the offering for public consumption of the two 'victims' (of the hurricane and the police officer) – the 'little boy', so distraught that he became physically ill, and the dog with the endearing name of 'Snowball'[34]. A quick search

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[34] One can only speculate about the media response and impact had the 'little boy' been an adult person and had 'Snowball' been a pit bull cross named 'Spike'. Interestingly, Foster is later cited as describing 'Snowball' as 'a medium-sized mutt' (http://www.animalpeoplenews.org/05/10/NOpetevacCrisis1005.htm).

on the internet will yield numerous retellings of the incident, embellished to varying degrees. Sadly, also from an internet search, it appears that the boy and his dog were never reunited.

Interestingly, a line in the original Foster (2005 on line) piece, which is very telling in its own right, but which does not appear to have initiated any discussion or awareness, is a comment offered by one of the refugees in reaction to the poor conditions in the Superdome: '*They treated us like animals*. Everybody is scared.'(Italics added). This is an overt example of the embeddedness and taken-for-granted-ness of the inherent valuing bound up within the $\frac{Human}{Nature}$ binary and is revealing at several different levels.

The speaker has uttered the words to express how poorly they felt they were being treated. Put in other words, they are saying, 'bad treatment is for animals, not for us'. This is, in itself, tantamount to saying, 'I know and accept that bad treatment is for animals, but it is not fair that we humans should be treated that way'.

The author has intentionally repeated the words in their article, operating on (at least) two different levels. The words are intended as a manipulation – used in order to evoke sympathy for the victims of the hurricane and conditions of the stadium that they must endure. They also play to the wider audience's understanding of (or lack of) and acceptance of the implicit valuing bound up within the statement. Either way, the inferred given is that animals are generally treated less well than humans and these particular people are being treated just like animals – which is wrong for the people. As such, the words uphold the status quo of a $\frac{Human}{Nature}$ binary and offer no challenge to it, whatsoever, and, in turn, further entrench it.

The St Bernard Parish incident mentioned in the Coren article above is also cited by Irvine (2009:24,25), who describes how several officers in the parish shot and killed dozens of companion animals who had been taken to three local schools by their owners, where they were to take refuge. When the owners were evacuated from the school they were ordered not to take their animals, being told, '[i]f you want to get

out alive, you have to go now. We're saving people, not animals[35].'…. Nothing could be more human-centric/ anthropocentric than a statement such as this. This concept will be expanded on in Chapter 7 (Disconnections). What made the officers' behaviour even more contemptible was the heinous, inhumane *way* many of the animals were shot: some dogs were shot while running to escape and many, forensic evidence later showed, were shot in body cavities and left to bleed to death slowly. The officers, who then went on to killing animals on the streets, and were video recorded by an observer, were eventually indicted for the street, but not the school, killings[36].

Katrina and the Pets Evacuation and Transportation Standards (PETS)Act 2006

The 'Snowball' incident has also been recounted in academic literature (see, for example, Baum 2011; Irvine 2009; Leonard and Scammon 2007) in describing the public and political awareness of the dilemma of 'pets' in disasters that it ultimately created. Irvine (2009:23) notes that Foster's original piece transformed 'an incident into a story' and drew attention to certain questionable/uncompassionate law enforcement approaches and helped instil sympathy for the animals of Katrina.

Baum (2011) refers to the incident in the context of the part it played in the introduction of the PETS Act 2006, a connection that Foster (2010 on line), herself, also made when she wrote,

(Text has been removed due to copyright restrictions)

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[35] Baum (2011:114) notes that the human companions of these animals were forced to evacuate at gunpoint or in handcuffs.

[36] Further information regarding this incident and the indictment can be found at: http://dogbusters.blogspot.com.au/2006/12/st-bernards-parish-after-katrina.html and http://www.wafb.com/story/5782000/st-bernard-deputies-indicted-for-shooting-dogs-after-katrina

Wan (2006: on line), describing the loss of animal life in Hurricane Andrew, 1992, links media coverage with public awareness and reaction in context of the 'emerging field of disaster planning for pets' – following Andrew 'pet' first aid classes became increasingly popular.

Baum (2011:105,106) describes the extensive news media and internet coverage of the flooding of New Orleans, in general, and the story of Snowball, in particular, as contributing to a growing public awareness of the plight of animals – people could now see for themselves, as it was happening, the extent of the problems for animals and their Person/s In Care (PICs) in the throes of a disaster.

Powerful images can to lead to social reform. Draeger (2007:293) likens the impact of the widespread use of still and video footage to highlight the suffering of animals in Katrina to that of a photo essay which appeared in *Life Magazine* in February, 1966. 'Concentration Camps for Dogs'[37] offered shocking images of mal-treated dogs housed in appalling conditions by dog 'dealers' who traded the animals to US research laboratories. The public reaction to the images resulted in the rapid passage of the Laboratory Animal Welfare Act of 1966. Draeger (2007:294) cites Curnutt (2000) as remarking,

> The story instantly ignited public outrage…More than 80 000 letters expressing disgust and indignation flooded Congress, a deluge eclipsing that of any other issue, including civil rights and the Vietnam War.
>
> …The Laboratory Animal Welfare Act, later shortened to the Animal Welfare Act, was signed into law by President Lyndon Johnson in August 1966

Potts (2010:293) recounts a similar situation whereby public reaction to psychologist Harry Harlow's insensitive (and showing blatant disconnection) experiments in the 1950s and 1960s, exploiting baby Rhesus monkeys, contributed to the establishing of the animal rights movement in the United States.

Little more than a year after Katrina, in October 2006, President Bush signed off on the Pets Evacuation and Transportation Standards Act (PETS Act). Primarily a response to roused public reaction, the Act was presented as policy to ensure the protection of companion and service animals and that they were included in all

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[37] The article *'Concentration Camp for Dogs'* can be accessed on line at
https://awionline.org/store/catalog/animal-welfare-publications/animals-laboratories/concentration-camps-dogs

evacuation plans. However, as Leonard and Scammon (2007:49) point out, '[p]ublic policies reflect the values of the society in which they are implemented. Emergency planning policies convey notions of who and what are worthy of and need protection'. They observe that policy governing the welfare of animals in emergency planning is guided by four key areas of concern: economic priorities, public health, emotional health and well-being of PICs, and the welfare of the 'pets'. As such, then, human needs/interests are still the predominant concern in an Act supposedly established for the needs and welfare of animals. One of the key factors in this situation is the way that most (if not all) nonhumans are valued as 'goods'/possessions.

Traditionally in US law (as is the case in all other western cultures), animals have been treated as the legal property of their 'owners', and this has been reflected in emergency policy and planning. The focus of planning, then, has been on the rescue and safety of human life and not 'property'. Underpinning the notion of nonhuman animals as property is the dominant paradigm of a human/nature divide (as discussed in Section 2.3.1), with its entrenched perception of humans as being, not only separate from the rest of nature, but also in a hierarchically superior relationship to it. Only with awareness and a change of language can come a change in behaviour. Brackenridge, Zottarelli, Rider and Carlsen-Landy (2012) state that the PETS Act was not conceived with animal welfare in mind but was rather aimed at improving 'human evacuation response'. Numerous authors (for example, Austin (2013); Hunter, Bogue *et al* (2012); Baum (2011); Zottarelli (2010); Edmonds and Cutter (2008); Barnes (2006); Hall, Ng *et al* (2004); Heath, Beck *et al* (2001a)) have noted the reluctance of 'pet' owners to comply with evacuation protocols that do not include their animals, by choosing to remain with them (or engaging in risk inducing behaviors by returning for them before it is declared safe to do so)[38]. Thus, the seeming inclusivity of animals in evacuation and sheltering plans was expected to encourage more people to obey official instructions to leave their homes and therefore was more utilitarian in purpose, with the end-goal being improved outcomes for humans and any benefits to nonhumans being incidental/secondary.

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[38] Decker *et al* (2010) cite an American Animal Hospital Association (AAHA) survey which found that 56% of pet owner respondents would risk their own lives to save their pets (Decker *et al*, 2010, 'Emergency and Disaster Planning at Ohio Animal Shelters', Journal of Applied Animal Welfare Science, Vol 13, No. 1, pp66-76)

Brackenridge, Zottarelli *et al* (2012) conducted a study following Hurricane Ike (Texas, 2008) to test the efficacy of the PETS Act. They came to the conclusion, that, despite being increasingly seen as members of the family by individuals, while animals were still regarded as possessions in the eyes of law and policy makers, they would continue to be vulnerable dependents, rendering the Act as less than effective, reflected in its 'less than enthusiastic support' (pg. 236). Factors such as the strength of the bond, ability/logistics to transport 'pets', accommodation with 'pets', and availability of resources all still played a significant role in evacuation success or failure[39]. Potential reasons offered for the evacuation failures include: people's unfamiliarity with the law and with options available for support; people were aware of but were unsatisfied with the options; jurisdictional difficulties with practicalities and technical issues surrounding compliance and information dissemination and, finally, possible issues of people's trust in government, following official responses and actions (often judged as inadequate or inappropriate) during and after Katrina. Brackenridge *et al* (2012:237) note that the media images and stories of the anguish of people being separated from their 'pets' and of the plight of stranded animals are now part of the public's 'collective memory' of Katrina. Buttressing the notion of the inadequacy of official responses to Katrina, Cutter and Smith (2009:28) write of the 'gross mismanagement in protecting lives and public safety'.

Baum (2011) in a similar sentiment to that of Leonard and Scammon (2007), likewise argues that the language of the statutes make clear that it is ultimately human life that is valued over animal life and this is the true focus of the Act. The legal status of animals in US law predominantly as property denies them any intrinsic rights/worth and as such they are considered to have less value (or value equated to their monetary replacement costs only). Therefore, in being seen as lesser in value, no (moral/ethical) need was seen for them to be included in rescue plans. Up to and during Katrina animal welfare and safety was considered a personal responsibility

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[39] Discussing their study on pet evacuation prior to Hurricane Irene, Hunt , Bogue and Rohrbaugh [Hunt, M. G., K. Bogue, et al. (2012). "Pet Ownership and Evacuation Prior to Hurricane Irene." Animals **2**(4): 529-539.] note that along with the availability of these means and resources, costs also came into bear as well as the lack of knowledge of the locations of shelters and the benefits of them.

with individuals expected to make their own disaster plans for their animals. This is still widely the case in Australia[40].

While at first the laws seemed to be a radical new step in the direction of deserving inclusivity for animals, the wording and terminology indicate that there is still much more to do done before full inclusivity is achieved. For instance, Baum (2011:111,112) points to vague and indefinite phrasing in both the federal PETS Act and in state legislature on disaster planning. The federal act requires that state and local emergency plans '*take into account* the needs of individuals with household pets and service animals'. Thus, it is entirely possible to simply give consideration to animals' needs in plans, decide that it will be too unworkable or too expensive to act on and omit, but, by having 'taken it into account' will have still fulfilled statutory requirements. In this way, political consciences are appeased but animals are no further advanced or better off. Nor for that matter, are the owners, who were supposedly to benefit from the Act as well.

Not only is the term 'takes into account' imprecise and equivocal, the law itself 'does not provide any consequences for failure to implement the plans or even to include the animals in their plans in a meaningful way' (Baum, 2011:114). In essence, the Act is symbolic and there is, therefore, little compelling impetus to drive radical social changes that will afford real protection for animals in disasters.

Similar loose terminology can be seen in US state legislature. The Louisiana state legislature, amended in 2006 to require the inclusion of animals in disaster plans, contains such phrasing as:

> 'To [e]nable, *wherever possible*, pet and pet-owner evacuations for disabled, elderly, special needs residents, and all other residents *whenever such evacuations can be accomplished without endangering human life'*

…along with the wording, with regard to allowing 'pets' in carriers on 'public transportation during an impending disaster, *'when doing so does not endanger human life'* (Baum, 2011:111-112) (all Baum's italics).

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[40] Most government sites (Local and State) have websites providing emergency advice for 'pet owners'. See, for example, Victoria State Government, 2017, *Agriculture Victoria: Pets in Emergencies*, on line http://agriculture.vic.gov.au/agriculture/emergencies/pets-in-emergencies, available 24/10/2017

'[*W*]herever *possible'* certainly offers no guarantee of evacuation. '[*W*]*ithout endangering human life'* makes it clear that humans will still be first priority and animals will, for all intents and purposes, be at the mercy of some decisions made in the midst of turmoil/upheaval, and even, perhaps, by individuals who may possibly have an implicit bias toward saving human lives only.

Even the category 'household pet' is contentious. The term is not defined in the PETS Act 2006 (Leonard and Scammon 2007; Baum 2011). It is used in other statutes, such as housing regulations, to encompass domesticated animals such as dogs, cats, birds, rabbits, fish, rodents and turtles. So did the Act include pet horses, goats, pigs or any other traditional farm animal kept as a pet, snakes, lizards, frogs…? In October 2007, the Federal Emergency Management Agency (FEMA), for the purposes of disaster funding disbursements, restricted the term 'household pet' to mean dog, cat, bird, rabbit, rodent and turtle only and they determined that these animals must be transportable in commercial carriers. As such, it would seem that an animal's size is certainly one limiting factor in whether it stands any sort of chance of being included in any evacuation effort. The issue of animal size will be revisited in Chapter 7 (Disconnections, pg. 224).

Baum (2011) highlights another concerning issue when she notes that the PETS Act has the potential to make matters even worse for animals in some instances. It might create the misapprehension for some PICs that they will be automatically granted a place of shelter with their animals only to have them refused and become separated from them. The animals may then be lost, rehomed elsewhere or even destroyed without the PICs' awareness or even recourse. The animals may essentially have been better off left at home with food and water, with the PICs able to return to them soon after the event.

Decker, Lord, Walker and Wittum (2010) conducted a survey of 115 animal shelters in Ohio during 2007 to determine the 'level of the emergency and disaster response planning' undertaken in the period since the introduction to the Act. At that time only 13% had a completed written plan and a surprising 66% of shelters were unaware of

the PETS Act (a year after its introduction)![41] The authors suggest this lack of awareness may reflect the lack of involvement of Ohio shelters in local and state emergency and disaster planning. This, in itself would seem to underscore the importance of co-operation and integration between agencies from all levels and interests/foci, the greater need for dissemination of information from more politically powerful groups, and the recognition of the potential resources within smaller organisations that might be otherwise overlooked yet be of value to the development of effective disaster/emergency planning. There are, though, numerous impediments or challenges that are likely to hinder cooperation between diverse organisations. For example, political and ideological differences would be significant obstacles to achieving fully altruistic collaboration. Similarly challenging, would be issues such as the complexities of service integration or other fundamental issues like the differing goals and funding capabilities of for-profit driven organisations versus the not-for-profit.

Decker *et al* (2010) also comment on the possible limitations imposed by a lack of, or constraints on, state and local government funding and resources and a reluctance to budget for the relevant services, equipment and infrastructure to accommodate the emergency and disaster rescue and sheltering of animals. While monetary concerns will, of course, always impact on the number and types of projects undertaken by organisations and governments, it is also possible that this valuing and prioritising within budgets reflects deep rooted ideologies [*weltanschauung*] that will always place the needs of animals last, regardless. For many types of groups or organisations (and individuals) – besides the need for material and structural provisions – paradigmatic change through education and extension of awareness (of enculturation of attitudes toward animals and of the intrinsic value of nonhuman life) would be necessary. Ultimately, this would lead to attitudinal changes and the possibility of breaking minds free that are so enmeshed within the traditional capitalist system of the valuing and prioritising of the human.

Another example of the need for extension of awareness can be observed in the bias felt toward certain breeds of dogs and the prejudgment of their behaviour. Discussing

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[41] It has proved difficult, thus far, to locate any studies later than this particular one to test shelter awareness and compliance (of and to the PETS Act) statistics.

Breed Specific Legislation (BSL)[42] in respect to emergency planning, Cattafi (2007:351) argues that the discrimination against certain breeds of dog classed as 'dangerous' and their automatic exclusion from emergency/disaster preparedness is akin to 'racial profiling': that simply being assigned to a particular 'dangerous' breed does not make the dog inherently aggressive or vicious. Cattafi (2007:356) notes that US Humane Society, acknowledging the complexity of the issue, officially advocates for legislation that will encourage 'reasonable and responsible dog ownership' generally. They argue that this may be more effective in preventing dog attacks rather than targeting specific breeds alone. A dangerous dog can potentially be of any breed and small dogs can bite as often as large ones. An aggressive nature can be the result of the combination of any number of factors, including, but not limited to, genetic predisposition, socialising (or lack of), training issues, owner behaviour and victim behaviour.

Coupled with the discrimination against a whole breed (several actually, including American Pit Bull Terriers, American Staffordshire Terriers, Staffordshire Bull Terriers) are issues of identification and policy/law interpretation which will create different sets of complications in disaster management/responses. Cross breeding can significantly change the physical appearance, leading to inconsistent or mis-identifications; individual ignorance about the breeds listed as dangerous can lead to misidentification and, a misinterpretation of the laws by enforcement officials to mis-class any larger breed (for example, a German Shepherd). Each of these instances may lead to the discrimination of an 'innocent' dog or, ironically, not identify one that is dangerous. Enough opportunities exist, however, to disadvantage dogs that, through no fault of their own, will be otherwise left completely vulnerable.

Cattafi (2007:370) points out that breed bans will still not prevent some people from defying them and they will choose to own illegal dogs regardless[43]. This in turn will create issues of safety in times of evacuation (for the animals, the PICs, emergency

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[42] Over thirty US states have breed-specific legislation [BSL] banning or restricting certain breeds of dog considered to be 'inherently vicious'. Some provide for exemptions, such as in Denver, Colorado, where there is an outright ban on these breeds: for example, where a person whose Pitbull was licenced before the enactment of the law, or where someone who is passing through Denver to another location and has a permit to have the dog in the city for no longer than six hours (Cattafi, 2007:355).
[43] McNabb (2007:81) notes the popularity of dog fighting in New Orleans and that many of the dogs rescued were 'severely marred pit bulls'.

service personnel and shelter and accommodation personnel) and the possibility of their appearance must still be planned for. The author (pg. 370) poses the questions: will the PIC and dog be turned away? Will the dog be turned loose to fend for itself or possibly be killed? How will shelters conclusively screen for such dogs, given the subjectivity of breed identification, especially in disaster conditions?

Cattafi (pg. 372) suggests amendments to the current PETS Act and state laws by including a 'clause banning breed discrimination in the course of emergency plans involving animals'. While not suggesting a complete expunging of BSL, temporary sanctions (a non-discrimination clause) in times of emergency would allow for the transporting and sheltering of animals regardless of breed. This would reduce the possibility of disruption and confusion, save the lives of more animals, encourage PICs to leave their homes with their animals, reduce the numbers of dogs left to roam and at the same time increase safety for rescue workers and the public.

Without drawing on a deconstruction of its language (as offered by Baum 2011) Cattafi (pp. 372-3) pragmatically acknowledges the 'original purpose for the PETS Act, which is to preserve public health and safety, and increase compliance with mass evacuations'. Likewise, Zottarelli (2010:120) argues that the impetus behind the Act was the interests of human welfare and safety. However, as the author goes on to note, it does not, at least, 'continue a blanket disregard for pets'.

While the PETS Act in its current form may be symbolic and not provide for strong punitive consequences nor provide strong, immediate legal impetus for change, it can still have positive longer term outcomes. Bound up in a transforming/evolving cultural *zeitgeist*, it places the issue into the consciousness of law and policy makers and 'legitimizes' the issue from a moral and ethical standpoint. It gives animal advocates a legitimate and deserving place at the discussion table and creates the opportunity for more holistic consideration and debate (Wan 2006; Leonard and Scammon 2007; Baum 2011).

From an international perspective, not only has a 'precedent' been established through the enacting of a law that at least 'tips the hat' toward inclusion of animals in disaster rescue planning, but the opportunity to observe a working model has been afforded. It is now possible to monitor/scrutinize the impact of the Act in the US and

contemplate its apparent various pitfalls and benefits and then formulate and adapt as is appropriate[44].

Human-nonhuman bonds in the face of a hurricane

As with New Zealand disaster literature, US disaster literature addresses the various impacts of these types of events on human-animal relationships. While, as Zottarelli (2010:111) observes, research on the impacts of pet loss (death and non-death) on their humans is 'limited', a large portion of what has been written is dedicated to the impacts of hurricanes in particular.

Writing on Katrina, Zottarelli (pg.112) addresses the 'reasoning' behind people being separated from their animals in rescue efforts and at shelters and temporary accommodation (sometimes by force). She notes that 'human health and safety' was the impetus for doing so, but points out that 'pet' loss, itself, also carries risks to human health and safety.

Prevailing perceptions hold that strong bonds between a person and their 'pet' are more likely to be found in people with poor person to person attachments, and who use companion animals as surrogate friends or family. Noted earlier, in the discussion of the Canterbury quakes in New Zealand, was a point made by several authors (Morley and Fook 2005; Evans and Perez-y-Perez 2013) in regard to the tradition of trivialising the human-'pet' relationship. However, this tendency to pathologise such attachments overlooks the evidence that they can be formed *in addition* to other, so-called 'healthy', person to person relationships and as such are not 'psychopathological' (Zottarelli 2010:111).

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[44] That the PETS Act is not the full solution to the safety of animals in disasters would seem to be apparent from reading an on line article by Matt Bershadker, President and CEO, ASPCA (2017), in which he discusses the organisation's responses to Hurricanes Harvey and Irma [2017]. He states,

> Congress is also trying to make progress on animal safety during disasters. Last week, with help and support from the ASPCA, Rep. Dina Titus (D-NV) introduced the Animal Emergency Planning Act, legislation that would require American Welfare Act licensees to develop disaster plans and keep them on file – a rule long delayed by USDA.

(Bershadker, M, 2017,21[st] September, 'The Lesson of Harvey and Irma: An Animal's Best Ally is its Community', ASPCA Blog (https://www.aspca.org/blog/lesson-harvey-and-irma-animals-best-ally-its-community , available on line 16/10/2017).

In a similar vein, Gavriele-Gold (2011:91) notes the common misconceptions in judgment of the quality of, and reasons for, human-'pet' relationships (in this instance the human-canine bond) and ties them to the adherence to 'Freudian substitution theory' – 'as much by academics as by publishers of dog magazines, breeders, dog trainers, walkers, and humane society attendants'.

Freud described his own dogs as substitutes for the additional children he desired. In analyses of animal phobic clients, he described the animal as a substitute for the human that was fundamentally at the root of (or the cause of) the phobic condition. He assigned animal names for some of his important cases (such as 'The Wolf Man') and he described animals as substitutes in the use of totems by primitive peoples, bound up in developing humans' (ontological) understandings of the nature of their existence and their place within nature (Gavriele-Gold 2011:96).

Gavriele-Gold (2011:96) (rather wryly) notes that 'Freud's followers, always more Freudian than Freud himself', have, by applying Freud's 'personal references to his relationships with his own dogs to their analysands', since been more implicit in entrenching the pathologising of the human-'pet' relationship. The author further adds,

> Thus, his followers ultimately pathologized the human-canine relationship as being nothing more than a string of neurotic symptoms in which the animal was anthropomorphized, in which human love was displaced onto an animal, and in which the relationship substituted for unconscious wishes for a spouse or a child.

The common tendency to belittle the relationship between a person and their companion animal has the consequence of considerably adding to the psychological trauma experienced by PICs who lose their animals due to disaster related circumstances.

Zottarelli (2009:112) notes the significantly higher incidence of psychopathology (acute stress, peri-traumatic dissociation, symptoms of depression and PTSD) among people who lost animals during Hurricane Katrina compared to PICs who did not lose their animals. A survey conducted by Lowe, Rhodes, Zwiebach and Chan (2009) produced a similar conclusion. Investigating the connection between 'pet' loss and perceived social support (a resource that helps fosterl resilience), they note that those PICs with low levels of perceived social support prior to Katrina were left more

vulnerable to distress due to 'pet' loss as a result of the hurricane. The companionship and support given by a 'pet' can provide the owner with an important source of stress-relief and a greater, more positive perception of social support. Thus, companion animal loss can contribute to a decline in resilience and an increase in psychosocial dysfunction. The authors argue for policy to 'address the needs of pet owners, including arrangements for pets in shelters and hotels and coordinated efforts to reunite pets with their owners' (2009:246).

As discussed previously, even in normal circumstances, grief over companion animal loss is generally disenfranchised. Not being afforded the opportunities to express that grief in times of disaster through lack of appropriate services, opportunity, embarrassment due to the uncompassionate attitudes of others or simply others' ignorance of the depths of the emotions, coupled with the stress of the disaster itself, can lead to complicated grief reactions. Such grief reactions can include (*inter alia*) one or several of the following: severe depressive symptoms; intrusive thoughts; preoccupied thinking of the deceased; and/or feelings of excessive loneliness (Prigerson, Maciejewski et al. 1995; Horowitz, Siegel et al. 2003; Bonanno, Neria et al. 2007).

Voelker (2006:259) offers some figures to help put the significance of stress reactions to Katrina into perspective: 45 % of the 166 individuals interviewed to test for PTSD rated high enough on the scale to warrant being referred for mental health services. Extrapolating the numbers, that equated to between 142 000 and 214 000 adult victims of Katrina. When combined with the numbers for those estimated to have sub-clinical mental health needs the figure rose to around 500 000.

Zottarelli (2009:113) further describes how disparities in race, class and gender affect social vulnerability and resilience to such life challenges as natural disasters. In the context of Katrina, attention is drawn to the differences in social circumstances and demographics between those in most large-scale evacuations in suburban areas compared with those in New Orleans, a central urban environment. For example, the specific issues associated with lower car ownership in the city provided additional challenges for socially and economically disadvantaged PICs. Inability to provide their own transport for their animals meant increased likelihood of both evacuation

failure and of 'pet' separation. Residents may have opted to remain behind with their animals, defying orders to evacuate. Or they may have become separated from their 'pets' when forced by authorities to evacuate and then had to rely on public transport and/or public shelter which would not allow access to animals.

Other issues associated with socio-economic disparity will also impact on social advantage (or lack of): minority populations, especially non-English (or foreign language) speaking people, age and the elderly, particularly those with health issues, female-headed households that are less well prepared for evacuation, and those who rent rather than own property, are all more likely to be more exposed to disadvantage and less resilient. Cutter and Smith (2009:31) likewise address the vulnerability to disasters of disadvantaged groups, noting in particular that entrenched patterns of class and race divide were at play in the preparations for, and responses to, Katrina. These, in turn, impact on individual and community recovery capacity[45]. For the PICs among these groups of people there are much greater chances of higher levels of traumatic stress or psychopathological reaction to disasters, making 'those already vulnerable…more vulnerable' (Zottarelli, 2009:114).

Zottarelli's study also highlighted the impacts of family unit disruption associated with animal evacuation, noting, '[t]he separation of family units complicates evacuation and sheltering, further strains response and recovery efforts, and creates a greater need for family reunification services' (2009:119). Clearly, the need for better planning, allocating of resources and considerate accommodating of the human-'pet' bond will provide benefits beyond the individual level to the community level. Hall *et al* (2004:373) acknowledge the interconnectivity between catering for the human-animal bond in disaster preparation and community health when they conclude,

> 'Understanding the intricate relationship between humans and animals is an
> important component of a comprehensive public health approach to disaster

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[45] Cutter and Smith also go on to point out that despite the attention drawn to this issue in the media it was seen to be repeated again in 2008 when Hurricane Gustav struck Louisiana. Officials organised two evacuations: one for people with cars, who could then leave the city to find independent shelter, and one for those without cars, who happened to be mostly poor African-Americans. The second group were disadvantaged even further, by not being given adequate information about the expected duration of their evacuation or where they were going, nor were they provided with adequate facilities to be temporarily housed in (2009:32).

response and a critical element in promoting the resilience of individuals and communities'.

Perhaps because of an intensification of numbers involved, disaster situations focus particular attention on aspects of human-nonhuman bonds that in non-disaster times may not be so obviously witnessed. One such situation relates to disagreements over 'claims' to nonhuman family members.

Companion animal custody disputes

> The classification of a living being as property has long been an effective tool in perpetuating the subordination of that being (St Pierre 1998:255)

One of the more unusual and controversial side effects to arise from Katrina has been the proliferation of companion animal custody disputes – a matter which, in itself, demonstrates the multifarious nature of issues which can ultimately arise from management responses to natural disasters. McNabb (2007) notes the unprecedented scale of the phenomenon and the implications for issues of 'ownership', care, morality and law in connection with animals.

Many animals were left behind at the time of evacuation. Some people thought they might only be gone for a small amount of time (misguidedly gauged from past experiences of less severe events) and left animals at home with what they thought would be adequate food and water[46]. Some tried to take their animals with them and were refused access for them (to either transport or shelter, as mentioned above) and subsequently became separated from them. There were also those animals who were genuinely neglected and selfishly abandoned[47], sometimes in extremely ill-considered circumstances. McNabb (2007:78) notes that some animals were left in yards tied to stakes or fences, despite broadcasted warnings of the hazards of doing so, such as that by the National Hurricane Centre on the day before the hurricane:

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[46] Even where this might have been possible the arrival of Hurricane Rita around three weeks later created additional severe damage and storm surge flooding, further preventing people from returning home and categorically sealing the fate of many trapped animals.

[47] Several online accounts address a similar situation which occurred during Hurricane Irma (September, 2017). Tens of companion animals (mainly dogs) were trapped, tethered in yards or in pens, unable to shelter from winds carrying projectiles or sand which could strip their fur and skin. (see, for example, http://dailycaller.com/2017/09/09/over-50-animals-found-abandoned-in-west-palm-beach-tied-up-outside-as-irma-approaches/ ; http://www.abcactionnews.com/weather/hurricane/animals-abandonedleft-chained-during-hurricane-irma-will-owners-be-held-accountable)

> Most of the area will be uninhabitable for weeks…perhaps longer…airborne debris will be widespread…and may include heavy items such as household appliances and even light vehicles…persons…pets…and livestock exposed to the winds will face certain death if struck.

Whatever the initial circumstance, the result was that of the several thousand (out of a far greater number left behind at the time of the event) animals rescued only a minor percentage were reunited with their owners[48]. Some owners were able to be reunited relatively quickly and straightforwardly. Some didn't bother claiming their animals (Shiley 2006; McNabb 2007; Pezanoski 2009). For others, the process was much more complex, with many factors coming into play which would thwart chances for clear-cut, direct reunions between many animals and their original families.

Images of rescued animals were displayed on numerous, uncoordinated web-sites by various individuals or groups, making the process of trying to locate an animal that much more complicated. Many animals had lost their identification tags and were not micro-chipped or otherwise permanently identified. Vague or unhelpful descriptions of animals by PICs impeded the process of identification. Misleading recordings of locations of rescues confused identification (for example, the animal may have wandered some distance from its original home before being rescued) (Shiley 2006; Irvine 2009; Pezanoski 2009).

In some instances, biased judgments[49] on the part of rescuers played a hand in the lack of success of the process: the state/circumstances that many animals were found in led to judgments (rightly or wrongly) about the quality of care being provided by original PICs. The animals were deliberately de-identified, in order to prevent chances of them being reunited with their original families (McNabb 2007:80; Pezanoski 2009).

Profoundly tied in to the legal, and the more general, (extant and extensive) concept of animals-as-property (rather than as family members or individuals in their own rights) is the inherent assumption of the 'privilege'/ability to transfer ownership. This factor interweaves with other policy and management approaches ultimately to give

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[48] As noted previously, Lowe *et al* (2009:244) put the figure at 5%.
[49] For further information on *cognitive biases* (which could potentially be at play) , see, for example, Buttlemann D and Böhm R, 2014, 'The Ontogeny of the Motivation That Underlies In-Group Bias', *Psychological Science*, Vol. 25(4), 921-927.

rise to personal and organisational discord and angst. For example, further complicating the issue of reuniting animals with their original families was the lack of uniformity between the parishes of Louisiana regarding animal control laws. In particular, laws regarding the statutory number of days that rescue organizations were required to keep animals before ownership could be passed on (or, indeed, if *any* waiting period was necessary). Deadlines for claiming animals from shelters lapsed after varying numbers of days and the animals were sent on to other shelters out of the area (sometimes out of the state). As 'property', there is no legal (even, seemingly, moral) impediment to doing so. While acknowledging the existence of the despicable trading of humans for slavery, it is still generally hard to imagine the same shuffling and disposal occurring to other, human, members of families. Adding to the chaos of this situation was the reality of the physical or organisational shambles of many shelters, coupled with a lack of any coordinated, official database of records to track the transfer of animals. McNabb (2007:76) notes that of approximately 15 000 animals officially rescued, only about 3 000 were reunited with their original owners and the rest were adopted.

As previously noted, some animals were abandoned, forsaken to the circumstances of the hurricane, and left to fend for themselves or to die trying. Others were the victims of circumstances beyond their original families' control: families who believed they would only be gone a short time, or who were forced to leave their animals (some at gun point), or who believed they had left their animals in the care of someone else, only to return and find this agreement had not been honoured. Ultimately, significant numbers of people tried to locate their animals, tracing as best they could back through available records and resources (particularly social media). Of those who were able to locate their animals, many were to find that their 'pets' were now living with new families.

Under Louisiana law, as 'property', lost animals of Katrina were regarded as 'lost things' or 'corporeal movables' (McNabb 2007:76), for which 'diligent effort' must be made by the finder to locate the PIC. If, after three years, the owner is not found, the finder can legally take possession. Where the situation is deemed to be abandonment, and ownership of the 'thing' has been considered to be relinquished, then the finder 'acquires ownership by occupancy' (2007:76). Also covered under

abandonment provisions, are those situations deemed to fall under 'cruelty to animals', whereby the animal is deemed to have been left without 'reasonable arrangements for its proper care, sustenance, and shelter' (2007:76). There is a certain irony bound up within this situation in relation to 'cruelty to animals' and its 'connection to disconnection'. An action taken on behalf of an animal to prevent 'cruelty' to it is governed by its status as a possession. Additionally, the animal is voiceless in the process and has no option but to accept whatever outcomes are decided on its behalf. Crucially, it was up to the courts deciding the Katrina animal custody disputes to decide whether the animal has been lost or abandoned, as, if 'lost', the owner legally had three years in which to claim their animal ('possession').

Katrina provided a unique opportunity for testing traditional approaches to companion animal custody disputes and clearly exposed two competing models for determining into whose care animals would be placed. Importantly, as McNabb (2007) explains, these disputes (with many cases ongoing at the time of writing) highlighted flaws in US policy and law that failed to seriously consider (if at all) animals in times of disaster. Because of inadequate planning and provision for such circumstances, numerous animals were been caught up in a 'tug of war' legal battle between their adoptive families and their original families.

McNabb (2007) describes the two models available to judges for deciding outcomes of 'pet' custody cases: 1) traditional property and contract law and 2), the more 'innovative…"best interest of the animal" analysis' (2007:84). The latter model is concerned with determining who will be capable of offering the best home and living conditions for the animal. For some, this would seem to be the most meaningful/apposite criterion. There are those, however, who argue that this means of deciding a case could be seen to be akin to a child custody dispute in which a child is awarded to the wealthiest family (as Makowski, cited in McNabb, 2007:83, does) rather than basing the decision on more transcendent criteria.

Animal protection lawyer Steven Wise (McNabb, 2007:83) argues that the Katrina 'pet' custody disputes became predominantly a race and class issue, with the general movement of animals 'from poor black owners to middle-class white owners'. The 'best interest' model disadvantages the poor, who would be less likely to have the

funds to fight such cases (defence lawyers representing adoptive families tending to adopt the 'best interest' model). Additionally, some cases are based on unfair judgments of the original PICs' standards of care, given extenuating circumstances. Yet, cases fought under the traditional property law model are not going to be concerned with protecting those animals who risk being returned to homes in which they were mistreated or neglected. While the former model at least moves in the direction of considering animals as beings with interests, flaws are evident in both models – the latter obviously maintaining the status quo of animals as objects and reflecting the dominant and inherent disconnect of the current anthropocentric legal system.

Advice Unheeded?

Four years before Katrina, Heath *et al* (Heath, Beck, Kass and Glickman, 2001a; Heath, Kass, Beck and Glickman 2001b; Heath, Voeks and Glickman, 2001c) investigated links between 'pet' ownership and evacuation failure in times of disaster. Offered by these writers, among a number of practical suggestions to potentially increase evacuation success, were the following words:

> Evacuation of animals is…the most humane approach for animals threatened by disaster… If an environment is dangerous to humans as indicated by a mandatory evacuation, it must also be considered life-threatening for animals (2001a:1909).

> Predisaster planning should place a high priority on facilitating pet evacuation through predisaster education of pet owners and emergency management personnel (2001b:659).

> Households that evacuate with all of their important possessions, including pets, will likely create fewer problems later on…Therefore, emergency managers should advise owners to evacuate with their pets (2001c:1902).

In considering the prior discussion of the aftermath of Katrina with regard to the situation for affected animals, it is clear that the advice offered by the authors had either not reached its target audience or had, for whatever reason, gone unheeded.

Other key points to arise from the three above-listed papers include the following:

- As well as noting that evacuation with animals is the more humane action, the authors note that 'pet' owners (as those most responsible for the animal's welfare) who intentionally fail to evacuate animals and disaster managers who advise (or insist, as happened during Katrina) owners to evacuate

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without their animals, could be held guilty of animal neglect or be held legally responsible for animal injury, respectively. This has the potential to lead to significant changes in behaviours and attitudes should it be enforced. A precedent for this has already been established – in New York, after a scaffolding collapse and subsequent evacuation (no date provided), 'emergency management officials were prosecuted for advising people to leave their pets behind and for later preventing pet rescues' (2001a:1909).

- The authors consider that '[h]ouseholds that evacuate with all of their important possessions, including pets, will likely create fewer problems later on' (2001c:1902). Whilst listing 'pets' as another 'possession' is bound up in problematic issues of the entrenchment of dominant ideologies leading to the devaluing of animals, the sentiment still holds that being allowed to evacuate with animals will be beneficial to all involved, including the animals.

- More, and better resourced, 'pet' friendly accommodations would increase the chances of more successful evacuations.

- Greater self-reliance and better preparation by 'owners' should be encouraged by planners, including an awareness of what facilities and resources are available.

- The strength of the bond between 'owners' and their pets plays a part in evacuation success or failure. Lower 'pet' attachment is associated with a significantly greater chance of 'pet' evacuation failure – 'pet' evacuation failure is the 'most prevalent threat to the safety and well-being of pets in disasters' [2001a:1909]. The authors argue certain behavioural indicators (which, beside lower PIC attachment and commitment, include dogs living outdoors[50]) of potential 'pet' evacuation failure are present prior to disasters but that these behaviours are modifiable.

Heath *et al* (2001a, 2001b, 2001c) reason that education programmes are necessary to inform 'owners' on how to prepare for evacuations with animals (including having leads and carriers and other basic requirements such as any medications and some

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[50] Heath *et al* (2001b:663) note the potential logistical difficulties associated with evacuating outdoor dogs, including trying to catch them and the fact that they may be less socialised. They suggest that planners have certain measures in place prior to emergencies in order to improve public safety, including 'leashes, cages, leather gloves, vehicles and instructions or assistance for the safe handling and transport of such animals'.

food and water) and to know beforehand where to go with their animals. Such programs could also address 'owners'' lack of knowledge about basic animal husbandry, poor knowledge of their animals' needs as well as unrealistic expectations of their animals' needs during disasters. The authors (2001a:2001b) emphasise that strengthening the human-animal bond through education, being more engaged in their animal's welfare by regularly seeking veterinary care for their animals, neutering (de-sexing) them and permanently identifying them would ultimately aid in overcoming 'pet' evacuation failure.

It can also be argued that low attachment and commitment issues (as discussed by Heath *et al* in the above articles) are, in no small part, essentially tied to prevalent dominant western attitudes to non-human beings and the need to overcome traditional notions of a human-animal divide and the assumed inferiority of animal lives. A greater awareness and understanding of why nonhuman life has come to be devalued would lead to changes in perception. Lack of education on the needs of companion animals *per* se and specific lack of insight into such aforementioned philosophical underpinnings both contribute to animals' needs being considered less relevant (if considered at all). There would seem to be a direct correlation between lack of insight into the intrinsic value of animals, poorer education on animals' needs (and perhaps even education standards in general) and companion animal evacuation failure. The practical measures that Heath *et al* [2001a] propose would have even greater impact if they were combined with an approach that would lead to an increase in awareness by PICs (and policy makers) of more recondite/profound aspects of their relationships with their own animals and animals in general.

'Pet' friendly shelters increase 'pet' evacuation success
In the same way that Heath *et al* (2001a, 2001b, 2001c) stress the importance of preparation on the part of PICs, Irvine (2004) argues the importance of pre-planning on the part of policy makers and managers - that planning in advance for animals' needs by designing near-by spaces in 'pet friendly' shelters and increasing the numbers of these shelters (and access to them) will lead to increased human and nonhuman evacuation success. Provision of adequate space would mean less need for the drastic measure of euthanizing animals who cannot be housed – a better outcome for the animals and their families.

Barnes (2006) takes the importance of the notion of provision of adequate space even further when arguing for the increased likelihood of psychological resilience of disaster survivors (individuals and, thus, communities) by improving not simply the amount of space but also the quality of shelters.

> What an evacuated population needs is to be home. Home is not only where the heart is, but it is an environment that is nurturing and conducive to growth. When a shelter incorporates the elements that make a home the kind of refuge people seek day-to-day, the concept of a shelter could be more than just emergency housing but could be considered a Home Away from Home (2006:225).

The provision of more basic comforts within shelter spaces would be perceived as more supportive and nurturing and could be achieved through various measures that should be as consistent as possible from shelter to shelter. These would include, but not be limited to, catering for special needs groups, provision of entertainment, provision of access to various communications media and, importantly, provision of on-site animal accommodation.

In the context of providing or improving social support, a fundamental key tool in enhancing disaster resilience, Barnes (2006:228) notes the importance of the role of animals in providing comfort in stressful times. As he states (228), '[t]o many people their pets are members of their family, and thus part of their social support network' (indeed, for some people, their 'pets' may also be their only family and/or all that remains of their life pre-disaster, thus taking on an even more significant role in their lives). Barnes emphasises the current lack of access by 'pets' to emergency shelters plus the shortage of specific animal emergency shelters, also concluding that if 'pets' were able to safely accompany their families into emergency shelters it would lead to improved evacuation success and greater comfort to people to have their animals with them. It should also be pointed out that accommodating animals in human emergency shelters, or having specific shelters designed to cater for both people and animals, would also provide greater comfort to the animals, who would also be vulnerable to the stress of the situation.

'Pet' Families – A 'special needs' group

Edmonds and Cutter (2008:3) note that there are various studies on 'special needs populations'[51] and draw an analogy between these groups and PICs. This is possibly a more productive means to classify PICs rather than the term 'vulnerable', with its inherent politically fraught suggestion of power imbalance. The term 'special needs' suggests more clearly what it says: a group of people who have circumstances that require special consideration in planning measures – people who may or may not be politically or socially vulnerable.

PICs, as with other special needs groups, can experience certain limitations during a disaster evacuation that will not be faced by non-PICs. These limitations can hamper, or even prevent (due to limitations of choices and preferences to keep 'pets' at hand) compliance with evacuation processes. Edmonds and Cutter (2008:4) note, as with planning for any special needs requirements, certain strategic information is required – not the least of which is knowing, through 'pet' census programs, the numbers of companion animals (and their people) that have the potential to be affected and in need of services. As with Heath *et al* (2001a, 2001b, 2001c), Irvine (2004) and Barnes (2006) in the preceding sections, Edmonds and Cutter (2008:15) point to the potential of joint sheltering of people and their 'pets' in increased evacuation success, 'particularly if those shelters are located in high demand areas to minimise travel time and costs'. They suggest (pg.4) that census data would enable better planning for optimal demand, location and services and even transport, but that (US) census programs do not allow for the collection of pet data – as is the case in Australia[52].

3.1.3 Australia

There has been, until very recently, a dearth of literature on the topic of human-nonhuman animal relationships during situations of disaster written from an Australian perspective. Since Cyclone Katrina in 2005 drew global attention to the

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[51] See, for example, Drabek T, 1995, 'Disaster responses within the tourist industry', *International Journal of Mass Emergencies and Disasters* 13(1): 7-23 [tourists]; McGlown KJ, 2001, 'Evacuation of health care facilities: A new twist to a classic model', *Natural Hazards Review* 2(2): 90-99 [health care facilities]; Morrow BH, 1999, 'Identifying and mapping community vulnerability', *Disasters* 23(1): 1-18 [the elderly];

[52] Petplan, a 'pet' insurance company in Australia, conduct an online census but it is limited in scope and not compulsory (see, for example, https://www.petplan.com.au/news/pet-census , on line, available 16/10/2017)

issue, several authors here have addressed the topic from varying points of view but it still remains an under-explored area of research.

The Bushfire and Natural Hazards Cooperative Research Centre [BNHCRC] (2014[53]) produced a preliminary report on their investigation, 'The Experiences of Emergency Services Personnel in Supporting Animals and Their Owners in Disasters'. The report was based on seeking understandings of building 'best practice approaches to animal welfare emergency management, to enable engagement with animal owners and other stakeholders in disasters/emergencies (pg. 2)'. In 2015[54], the BNHCRC, produced their report 'Animal Emergency Management in Australia, again with a primary focus on animal emergency management and public safety issues. One of its primary aims is to encourage the improvement and coordination and co-relationships with/between all stakeholders (including the general public and animal 'owners) involved in emergency animal management. The report acknowledges that 'animals are important to people emotionally' (2015:7) and notes the consequences to human psychological health should the 'human-animal bond' (pg. 32) be disrupted or broken during times of disaster. Preventing or ameliorating such disruption is expressed in terms of consideration of 'disaster risk reduction and preparedness' (pg. 32) rather than to the benefit or improvement of human-nonhuman relationships *per se*. It is not its purpose to lead to fundamental paradigmatic changes in human-nonhuman relationships but, rather, to manage them under the current, human-centric, dominant paradigm.

Thompson (2013, 2015) advocates for exploiting the bond between people and their 'pets' to improve the outcome of evacuation success for both (people and 'pets'),

> [by] treating humans and animals as inseparable, we may be able to address their health and safety simultaneously, thereby using the *relationship* between human and animal. This may entail considering the target audience in terms of 'cat owner' or 'horse owner', rather than producing initiatives separately addressing humans or animals (2013:131)

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[53] Taylor M, G Eustace, B Smith, K Thompson, R Westcott, and P Burns, 2014, 'Managing Animals in Disasters (MAID): The experiences of emergency services personnel in supporting animals and their owners in disasters', *Proceedings of the Research Forum at the Bushfire and Natural Hazards CRC & AFAC conference',* Wellington, NZ, 2nd September 2014 (Australian Government)
[54]Taylor, M, G Eustace, M McCarthy, 2015, 'Animal Emergency Management in Australia: An audit of current legislation, plans, policy, community engagement resources, initiatives, needs and research dissemination', *Report for the Bushfire and Natural Hazards Cooperative Research Centre*, Melbourne, Vic, Australia (Australian Government, BNHCRC)

As such, the bond is the means to drive successful outcomes for human evacuations, which is the primary aim and the benefits to the animals/'pets' are chiefly tied to the fulfilment of this aim.

Trigg, Smith *et al* (2015a) discuss the types of relationships 'owners' have with their animals and the significance for 'owner' evacuation preparedness and evacuation success, with stronger emotional attachment being a stronger motivator for inclusion of 'pets' in all plans by 'owners'. This knowledge has direct implications for emergency service communicators: better understanding of the types of relationship that 'owners' have with their animals will allow for better, more efficient, targeting of preparedness information from emergency services.

In a similar vein, Trigg, Thompson *et al* (2015b, 2016) argue that disaster preparation and resilience can be improved through a more complete understanding of the way in which 'pet owners' senses of identity are bound up with those of their animals. They base their discussion on the importance of the identifying of, and preserving of, 'owner' identities and argue for

> …the importance of acknowledging the powerful intersubjectivity inherent to pet keeping, the inseparability of perceived pet identity from owners' experiences of the self and that preserving the cohesion of the two is an essential consideration for owners' psychological wellbeing when managing the integrated pet/owner in the face of risks posed by disaster and other hazards (2016:26).

They note (2015b:238) the vulnerability of animals, particularly domesticated, in disasters and their reliance on their humans for their safety. However, they also point out that the type of bond between 'owner' and animal can also impact on the decisions that 'owners' make regarding their own safety and that of their animals. In their approach to this issue, Trigg, Thompson *et al* (2015b) discus 'pet-owner relationship archetypes' and 'psychographic profiling' and its role in disaster communication. They note that, not only are there different types of 'pet-owner' relationships, but that these differences will translate to different actions taken (or not taken) by 'owners'. As such, these differences, in turn, call for relationship specific communication: toward the owners by community/emergency management at the varying levels and within and between community management/emergency management organisations. The authors argue that targeted information is necessary in order to direct the most appropriate disaster preplanning information type

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(including what is likely most effectively to motivate them) to the particular 'owner' archetype, and encourage greater engagement in preparation behaviours, leading to greater disaster resilience. Adopting and engaging with the use of relationship specific communication will also encourage organisational awareness of, and sensitivity for, the various types of 'owner-pet' bonds and their specific needs, encouraging a paradigm shift in valuing such bonds (Trigg, Thompson *et al* 2015b).

In their discussion of the way animals are valued (particularly in Western society) and the consequences in times of disaster, Every, Due *et al* (2016) draw on the work of several key authors on the topic, including: Irvine (2009), particularly the notion of institutionalised thinking that guides which animals are included in evacuations and how animals, generally, are catered for in disasters; Kellert's (1996) model for the human valuing of nonhuman animals; and Arluke and Sanders' (1996) sociozoologic scale (which describes a moral ordering of animals, dependant on the types of worth they are perceived to have. They emphasise (2016:358) that it is not 'animal guardians' alone who are influenced in their decision making by such valuing but, so too, are 'disaster planners, rescue personnel, and other community members'. They reason that this valuing system impacts, not only on which animals will be valued highly enough to be included in rescues, but that it also creates a source of conflict between those who have one interpretation of such valuing and those who have another. Several examples of such conflict can be evidenced within participants' accounts in Chapter 5, EVACP, page134, where contradictory actions and advice were offered in evacuation processes.

Summary

Much of the literature addressing human-nonhuman relationships in times of disaster is primarily concerned with human-companion animal relationships. Within this literature (and this review of the literature) there are a number of common themes.

The literature from New Zealand, arising after the Canterbury earthquakes, reveals a number of issues (recapped in the paragraphs below) which arose from a lack of adequate disaster management planning and inadequate and unco-ordinated

responses within and between agencies of varying levels[55]. Underprepared and under-resourced welfare centres pose additional problems, as does a lack of awareness of the potential post disaster needs of the community (including 'pet' friendly accommodation). Literature from the US (see, for example, Edmonds and Cutter 2008; Barnes 2006) also emphasises the need for adequate services during and post-disaster, including 'pet' friendly transport and temporary housing. Such recommendations, to a great degree, arise from the growing understanding of the enhancement of disaster resilience if PICs are able to have their animals close by during traumatic events.

A recurring theme across the literature from New Zealand, the United States and Australia is that of the underestimation of the strength of human-nonhuman bonds and the implications for disaster management. Similar percentages (more than 50%) of PICs in all three countries refuse to leave without their animals and, commonly, significant numbers of PICs return to their nonhumans before conditions are officially declared safe to do so. Such actions endanger themselves, rescue personnel and, potentially, their animals. Evidence of this occurring in Australia can be found in the participant extracts in this study, in Chapter 6.

Currently, in all three above mentioned countries, nonhumans are legally classified as possessions and PICs are commonly referred to as 'owners'. This formalises nonhumans' position in human communities as inferior in value and as *objects* of ownership. As one consequence, they are viewed as a kind of 'goods' which can be moved from place to place or between people/homes at the mercy of legal decisions made by humans for humans. Such valuing of nonhumans reflects the widespread embedded-ness of the $\frac{Human}{Nature}$ binary and the fundamental sense of disconnect that humans have with nonhuman animals.

An underestimation of the human-nonhuman bond stands to add significantly to the trauma of the disaster experience – at least for the human and potentially for the nonhuman as well. Post-disaster services are weighed in favour of human loss and trauma and, broadly, human-nonhuman bonds are both, trivialised and frequently

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[55] Evidence supporting aspects of similar issues occurring in Australian disasters appears within participant contributions in this project.

pathologised. Individual disenfranchised grief affects resilience, of the individual and, ultimately, communities by impacting on relationships, productivity and social cohesion.

Traditional media and social media coverage of, and reaction to, Hurricane Katrina had a significant impact on drawing attention to the plight of nonhumans (and PICs) during a disaster. The attention led to the passing of the Pets Evacuation and Transportation Standards Act (2006) in the United States. Several authors (see, for example, Baum 2011: Brackenridge, Zottarelli *et al* 2012) argue, however, that the language of the Act and its intent is human-centric and more aimed at improving human evacuation responses rather than that of nonhumans.

An awareness is raised in the literature (see, for example, Irvine 2009; Every, Due *et al* 2016) of how the consequences for the way different animals are valued within societies impacts on their disaster experiences and determines their chances of survival or not. While not specifically addressing this valuing in terms of human dis/connections with nonhuman animals, the pervasive sense of disconnect from (and perceived pre-eminence above) nonhuman animals is inherent within the valuing that has been addressed in this literature – although not overtly challenged. This thesis will be paying particular attention to notions of connection with, and disconnection from, nonhuman nature and more will be written on these in Chapters 6 and 7 in an effort to offer such a challenge to the dominant paradigm. Before turning to these concepts, however, the methodological approach underpinning this study will be addressed in the following chapter (Chapter 4).

4. METHODOLOGY

Details of the methodological approach adopted for this project will be presented in this chapter. A rationale for the opting of a qualitative (phenomenological) methodology is provided, as are various perspectives on phenomenological approaches, culminating in an overview of critical hermeneutic inquiry – the key epistemological driver of the analysis section of the study.

The six step process of a thematic analysis (TA) (as outlined by Braun and Clarke, 2006), which was utilised in the data organisation stage of this project, will be described and demonstrated in the methods section. The aims of the project will be re-stated in this section also, in order to remind the reader of the intent of the study and to provide a timely cross reference.

The codes under which the data has been organised will be introduced in the methods section of this chapter, but they will be described in more detail in the results and discussion chapters (Chapter 5, 6 and 7).

4.1 Rationale for a Qualitative Approach

 Methodological approaches broadly fall into two categories: quantitative and qualitative. Quantitative research is generally associated with a positivist, scientific approach to a research study, although some qualitative data can be analysed using quantitative measures, whereby, for example, statistical information might be gleaned from such data. Ontologically, positivist research is concerned with, or based on, what are considered to be the laws of the natural world. As Ashworth (2000:91) explains, '[p]ositivist research presupposes that there is some underlying, true, unequivocal reality, and a theory covering this is to be sought by the research'. In this type of research, hypotheses are designed in order to be tested in an effort to determine 'factual' outcomes and, through a process of verifying [validity], that the data match 'the reality they are supposed to reveal' (2000:91).

On the other hand, non-positivist, qualitative research is not reductionist and does not assume an unambiguous, inarguable, ultimate reality. It does not make broad

generalisations about the 'truth'[56] of the human experience. Rather, reality is seen as a social construct, contestable and contextual. Research based on this approach is aimed at understanding the lived experience of individuals and the descriptions or interpretations of their perceptions of their unique realities (Ashworth 2000; Jackson, Drummond et al. 2007; Creswell 2013). Such experiences cannot be reduced to measurable quantities. Entrenched, underlying values that influence peoples' actions and reactions can be evidenced across the recounting of the experiences of individuals. However, their experiences cannot be quantifiably measured in order to determine, say, how much/deeply or for how long different individuals will experience a particular phenomenon.

This study is not designed to test a hypothesis. It is designed to be an exploration of the disaster experiences of the participants in relation to the experiences they had with, and the decisions that they made on behalf of, non-humans. It is based on interpretive rather than quantitative/quantifiable issues, and thus calls for a qualitative methodological approach.

4.1.1 Further notes on qualitative methodology and analytic pluralism

A case for analytic pluralism

Discussing qualitative methodology, Cresswell (2013:7) notes, there are a '…baffling number of choices of approaches', with overlaps and variations between them depending on the discipline, or tradition, in which the research is being conducted. From among the many available qualitative approaches, which have originated from diverse fields of study, for example,

> '…narrative originates from the humanities and social sciences, phenomenology from psychology and philosophy, grounded theory from sociology, ethnography from anthropology and sociology, and case studies from the human and social sciences…' (Creswell, 2013:11),

it is even possible to design a qualitative study that incorporates aspects of more than one traditionally designated methodology.

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[56] If, indeed, such a 'truth' is even possible. Discussing Derrida's (1968) essay *Différance*, and his concept of the 'trace', in which the notion that identities are defined by their différance (deferment in time and difference in space), Rivkin and Ryan (2004:258) note,
'…a complete determination of identity (a statement of what something "is" fully and completely "in itself") would require an endless inventory of relations to other terms in a potentially infinite network of differences. Truth, as a result, will always be incomplete'. (Rivkin, J. and M. Ryan, Eds. (2004). Literary Theory: an anthology. Oxford, UK, Blackwell Publishing Ltd.)

In her discussion of a number of different research design types, Grbich (2004:152) observes the capacity for the evolution and interweaving of the different approaches as the sphere of qualitative methodology develops and is influenced by the various philosophical standpoints of the researchers engaged and by the topics being researched. She concludes (pg.172),

> 'it is possible to use multiple designs, e.g. feminist grounded theory or to use partial designs, e.g. 'quasi'-grounded theory or an ethnographic 'approach', where certain design aspects are incorporated but others omitted.'

In this manner of multiple designs, there are a growing number of writers who are advocating for, and describing, the use of what has been termed *pluralist* methodology (or analytic pluralism) (see, for example, Frost, Nolas *et al*, 2010; Frost & Nolas, 2011; Chamberlain, Cain *et al*, 2011; Katsiaficas, Futch *et al*, 2011; Lazard, Capdevila & Roberts, 2011; Clarke, Willis *et al*, 2015), in which 'the application of more than one qualitative analytical method [is applied] to a single data set' (Clarke, Willis *et al*, 2015:182). Chamberlain, Cain *et al* (2011) suggest the term 'multiple methods' may be more appropriate as *pluralism* can mean any of a number of different types of possible pluralisms, such as,

> '…a pluralism of method, the predominant use in the call; a pluralism of occasion, when research is conducted over several occasions and demands time (as we consider multiple method research does); the pluralism of researchers, when research is conducted by more than one person; and the pluralism of disciplines, or interdisciplinarity, when different researchers bring different disciplinary perspectives to the research.' (2011:153)

Some other writers (see, for example, Schroder, 2012; Asif, 2013) discuss pluralism but are referring to a combination of qualitative and quantitative methods, generally known as mixed methods.

There are various reasons suggested for the adopting of/turn to a pluralist/ multiple methods approach to research, including the argument for the avoidance of 'methodolatry' (see, for instance, (Gurman and Kniskern 1978; Martin and Sugarman 1993; Janesick 1994; Chamberlain 2000; Elliott, Fischer et al. 2000; Reicher 2000). The discussion on methodolatry is not a particularly new one as a scan of the publication dates provided here will indicate. Chamberlain (2000:285) writes of 'the privileging of methodological concerns over other considerations in qualitative health research', and argues that 'qualitative researchers are in danger of

reifying methods in the same way as their colleagues in quantitative research have done for some time.' In this same paper, Chamberlain (pp. 287-289) also describes the confusion which can arise when the new researcher is faced with the differing versions within methodological approaches. He describes at least 8 different frameworks within phenomenological methodology that researchers might be left to ponder over and then even poses the question they may be tempted to ask: 'is phenomenology a method at all?' (pg. 289). He argues that one of the common pitfalls, or consequences of methodolatry (particularly in phenomenological health research), is 'analysis that remains at the descriptive level' (pg. 290) when interpretation would be more valuable. Chamberlain is advocating a post-positivist stance to allow for flexibility and creativity within qualitative research that will allow for the researcher's philosophical, ontological and epistemological stance to be clearly expressed – without being concerned that doing so would be stepping outside the constraints or accepted/expected 'guidelines' for the conducting of the research under a traditionally defined methodology. This should not come at the expense of rigour but, "[w]hile we may desire and value 'good' method, we should also desire and value 'good' interpretations" (Chamberlain, 2000:291).

In 1999 Oakly used the term 'paradigm wars' when commenting on the 'institutionalization' of methodologies (pg. 253) in the context of mixed methods (quantitative plus qualitative). Frost & Nolas[57] (2011:115) reuse the term in context of their case for the use of pluralism within qualitative research. They argue that the multifariousness of people's life experiences lends to multi-ontological readings/interpretations of those experiences – more 'than a single theory and method allow us to appreciate' (2011:116). They further add, '…a framework of ontological and epistemological multiplicity and multidimensionality would be both appropriate and helpful in understanding such a reality' (2011:116).

Rolfe (1995:105) 'pulls no punches' when he states the '…focus on methodology stifles individual creativity and acts as a gatekeeper'. He advocates for an approach that accommodates a relaxing of the rules of methodology to allow for creativity in analysis: a process he refers to as an 'anarchist epistemology'. He points out that

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[57] In 2006, at the University of London, Drs Nollaig Frost and Belinda Brooks-Gordon established the PQR (Pluralism in Qualitative Research) project which has become the N-PQR (Network for Pluralism in Qualitative Research) - https://npqr.wordpress.com

even Einstein[58] (of course, writing from a reductionist perspective, and who employed the creative process of 'thought experiments') observed that those who dared to work beyond the restrictive parameters of systematic methodologies "… 'must appear to the systematic epistemologist as a type of unscrupulous opportunist'" (1995:108).

With a specific emphasis on human-animal studies (HAS), Taylor and Hamilton (2014) also argue for a more flexible approach to qualitative methodologies, including a greater prominence of interdisciplinarity, in order to more appropriately conduct meaningful studies about the relationships between humans and other animals – such studies in which humans have, till now at least, always been conducting the research and non-humans have remained as subjects (often objects) or 'silent' participants. Taylor and Hamilton discuss the benefits (and pitfalls) of an approach termed multi-species ethnography (MSE), which seeks to better address the types of 'philosophical dilemmas and questions' (2014:261) inherent in HAS. One facet of this would be to explore the possibilities of somehow including animals' 'voices'/perspectives within the research that centres around them and, as such, work to inspire a change of paradigm – from one in which the research underscores the inherent (in the dominant Western paradigm[59]), dualistic notion of a hierarchical power structure privileging humans to a model that is less partite, more inclusive and more holistic, and therefore more beneficial to all actors, in its designs, aims and results. This has been provided to a limited degree in this project whereby insights into the specific impacts of disasters on animals has been offered. These insights include the human participants' feedback on their animals' behaviours and/or health consequences due to their disaster experiences. This information has been included in the Appendix section of the thesis (Appendix C)

Other examples of combined qualitative approaches include: Johnson (2014), who provides an outline of the approach to her research project in which she combined constructivist grounded theory with discourse analysis, and argues that the blended approach strengthened her analysis and enhanced the generation of rich data; Fereday and Muir-Cochrane (2006), who write of a 'hybrid' approach to their qualitative

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[58] Einstein quotation originally cited in Schlipp P A, 1948, *Albert Einstein, Philosopher-Scientist*, Evanston, Il, Tudor, p683.
[59] This paradigm will be expanded on in the Results and Discussion section

study, assimilating 'Schutzian' social phenomenology – 'as both a philosophical framework and a methodology' (pg. 81) – with thematic analysis (TA). They describe their approach as uniting inductive and deductive code and theme development, demonstrating rigor and achieving a balance between the two. Joffe (2012:211), writing on thematic analysis, also notes the suitability of using TA with social phenomenology. Similarly, this project will adopt an approach combining a phenomenological approach with elements of a thematic analysis.

4.2 Research Methodology

The qualitative methodological approach taken in this project draws upon the fundamentals of a critical hermeneutic phenomenology to drive the analysis of the data collected. Doing so allows for the exploration of the dominant (but often hidden) world views and values that inform the decisions and actions that humans make on behalf of nonhumans during times of disaster. Some background on the pathway from early phenomenological inquiry through to critical hermeneutic phenomenology is offered in this section in order to provide context to this method of inquiry. The critical hermeneutic phenomenological approach is used in combination with the principles which guide a thematic analysis (TA) method (which will be described later in this section). A TA allows for the data to be organised in a methodical and reliable manner that facilitates a trustworthy analysis process.

4.2.1 Overview of the underpinnings of phenomenology as a methodology

There are two major types of phenomenology – transcendental or descriptive (eidetic) and hermeneutic or analytical. The former is grounded in the work of Edmund Husserl and the latter in the work of Martin Heidegger (Lopez and Willis 2004; Dowling 2007; McConnell-Henry, Chapman et al. 2009; Creswell 2013; Tuohy, Cooney et al. 2013). As Dowling (2007:131) points out, the term 'phenomenology' can refer to a research methodology as well as a philosophy and there are numerous styles of phenomenological methodology, sharing some features in common and yet also having their own distinctive aspects. Dowling further notes phenomenological methodologies can be situated within 'positivist (Husserl), post-positivist (Merleau-Ponty), interpretivist (Heidegger) and constructivist (Gadamer) paradigms' (2007:131).

Transcendental phenomenology

The phenomenological method has its roots in the philosophical method, *phenomenology*, founded by Edmund Husserl (1859-1938) (Moran and Cohen 2012). Moran (2005:Loc 293) defines Husserl's *phenomenology* as 'the careful description of what appears to consciousness precisely in the manner of its appearing': before any understandings can be assumed of a phenomenon, it should be described, as fully as possible, as it has been experienced by (appeared to) the conscious being. This experience is the 'lived experience' to which Husserl refers (Moran 2005; Moran and Cohen 2012) – and other writers, when discussing Husserl or his phenomenological approach (see, for example, Dowling 2004; Lopez and Willis 2004; Dowling 2007; McConnell-Henry, Chapman et al 2009; Moran and Cohen 2012; Tuohy, Cooney et al 2013). When Husserl wrote of *Lebenswelt* (Life-world or world of life) he was referring to 'the concrete world of everyday experience, the 'everyday world' (*Alltagswelt*) (Moran and Cohen, 2012: Loc 4040). Husserl desired to systematically describe this everyday, natural world – the world in which all other worlds (for example, science, culture, religion…) were situated and which included *all* living beings and things (Moran & Cohen, 2012:Loc 4062): the taken-for-granted world 'rarely made explicit' (Loc 4096).

Husserl's *phenomenology* was born out of his dissatisfaction with the limitations of the natural sciences, including psychology, in finding deeper understandings of the essences of everyday phenomena. In his *General Introduction to Pure Phenomenology* [60](1913) he describes seeking a clarification and preciseness in the use of the term and a science (*phenomenology*) by which to understand phenomena. Husserl's claim was that all senses or understandings of the word 'phenomena', and of phenomena, were 'modified' in specific ways by the 'sciences long familiar to us' (2014:Loc 256). He adds, to understand such modifications requires,

> 'achieving the phenomenological attitude, reflecting on its distinctiveness and that of the natural attitudes, as a means of elevating them into scientific consciousness – that is the first and by no means easy task…'(2014:Loc 256).

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[60] Husserl E, 2014, *Ideas for a pure phenomenology and phenomenological philosophy. First book: General introduction to pure phenomenology* (D. Dahlstrom, Trans.), Hackett Publishing Company, Indianapolis [original publication 1913]

Declaring Husserl's redefining of the term phenomenon as 'ground-breaking', Moran and Cohen (2012: Loc 5363) describe his 'transcendental phenomenology' as one in which '"the things themselves" manifest themselves to us in relation to the very manner in which *we* are present to them': 'the things themselves' referencing Husserl's phrase, which has become synonymous with transcendental phenomenology, '*zu den Sachen selbst*' ([the return] to the things themselves')(Loc 5373). Husserlian phenomenology, then, is purely descriptive and necessitates a suspension (or bracketing) of all established knowledge or, as Moran and Cohen (2012: Loc 5316) state; '…phenomenology for Husserl means a return to the sources of evidence in which things are given'.

However, despite Husserl's extensive exploration and development of his *phenomenology,* and that his work underpins all successive phenomenology, his perspective has been critiqued by subsequent philosophers, including among others, one of his own students, Martin Heidegger, and deconstructionist, Jacques Derrida. Moran (2005:Loc 7029) points to Derrida's criticism of Husserl's "unacknowledged and uninterrogated adherence to a classic 'metaphysics of presence' at the heart of Husserl's philosophy". Derrida argues that a metaphysics of presence, or a favouring of that which is present above that which is absent, creates (embedded) binary oppositions in language and thought and in which there is a hierarchical power differential where one part of the binary is more privileged (more powerful) than the other: presence/absence, speech/writing, human/nature, man/woman, and so forth (Derrida 1976; Lucy 1995).

Moran (Loc 7040) further describes Heidegger's similar critique of Husserl's 'commitment to an outdated "Cartesian" metaphysics', where 'relics' of a Cartesian dualism between mind and body can be evidenced in Husserl's differentiating between the physical world, as it is sensed and the realm of consciousness: a result born of his "formal ontological" account of the difference between the essences of physical things and the essences of consciousness' rather than an adherence to Cartesian-ism (Loc 7051). The human/nature (specifically, human/animal) binary, constructed through the entrenchment of Cartesian dualism (or a metaphysics of presence), is a fundamental western philosophical underpinning of the discourses and

actions which inform the human-nonhuman interactions during disasters on which the analysis offered in this thesis is based.

Hermeneutic phenomenology

Heidegger (1889-1976) was strongly influenced by Husserl, his teacher and for whom he was an assistant for a time following the completion of his doctorate (Watts, 2014: Loc 162). He was to soon develop his own ontological directions in phenomenology and in the process change its focus from description to interpretation (Watts 2014). He argued that Western philosophy (dating from classic Greek philosophy onwards) was mostly preoccupied with the consequences of Being but had ignored Being (or existence), itself. It had, in other words, neglected to question more fully and fundamentally what it was to 'be' and had instead located the 'meaning of Being in some ultimate principle or "divine agent"' (2014: Loc 269). Heidegger rejected what he termed 'onto-theologies' (Loc 269) which sought the origins of Being in the transcendental – that is, in some sort of super-Being or substance. His 'Being' was more fundamental, his approach more radical. Watts (2014: Loc 259) notes that Heidegger frequently uses the term 'primordial' when discussing the origins of Being and referring to that which absolutely precedes all else - that is, that before which there is nothing. For Heidegger, the costs of the neglect by Western philosophy to explore and understand Being have been primary in a deterioration of moral behaviour and values toward each other and, likewise, in the way we value our environment [61] (and thus, it could be argued, the others beings with which we share it) (Loc 249): a 'taken-for-granted-ness' of life itself, operating in much the same way in which ideas, and the language to describe them, can become taken-for-granted and mostly remain unchallenged. This belief of almost-meaningless-ness-from-overuse is reflected in his use of the word *Dasein*. Prior to Heidegger's use of this German term it had been used to refer to the 'existence of any entity, animate or inanimate' (Loc 473). Heidegger, however, used *Dasein* to exclusively refer to humans and the uniqueness of the *human* way of Being in the world. One reason for choosing a novel way of using the word was his desire to

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[61] Because we do not fully understand our Being-in-the-world, or our deepest nature, we do not, then, fully understand what is the best way to live in the world/be-in-the-world and, as a result we are condemned to repeat the range of behaviours that we have displayed so far, including all those that are ultimately detrimental to our existence as well those that benefit us.

'refresh' it and encourage novelty of thought[62] (Loc 484). Braver (2014:2) notes Heidegger's 're-coining' of words and terms as a means of avoiding the 'presuppositions' associated with their usual (over-)usage: in order to avoid the taken-for-granted-ness of traditionally held philosophical assumptions that he saw as flawed and to encourage looking at problems/phenomena with fresh eyes[63].

Watts (2014: Loc 494) writes of Heidegger's emphasis on the *da* ('there') in *Dasein* ('there-being' or 'being-there'): that Heidegger is claiming,

> "'Being there' is in fact *us*, and that we are *there* on behalf of Being: that we are in a sense the 'guardians of Being'". Heidegger claims that we are the 'clearing' or 'open space' in which Being is able to express itself. Without *Dasein*, the world as we know it would cease to exist; other entities would continue to exist, but there would be no-one to relate to them as entities, so their *Being* would have no meaning at all and, in a sense, would therefore not exist.'

However[64], this view is an ultimate privileging of humans/humanity – without human-beings to understand Being there would be, in essence, no other living Beings, only existing 'things'. This ties to the very notion that Derrida makes in his argument regarding a *metaphysics of presence*[65] (Derrida 1976; Lucy 1995), which, in the Western philosophic tradition (from Classic Western thought onward), privileges presence over absence, and in the process has entrenched a system of thinking in which all ways of 'constructing' stem from an origin which then defines what all else is not – the point from which all else develops, deviates, differentiates, complicates, obscures… This philosophical tradition has resulted in the embedding of understanding through the establishing of binary oppositions: knowing/understanding what something is, then, is made explicit through knowing what it is not.

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[62] Derrida (2016: Loc 2091, trans Geoffrey Bennington) claims that Heidegger never explained the term *Dasein* fully as a concept but left it to remain 'as a mysterious and enigmatic focal point, with complex inflections…'Derrida, J. (2016). Heidegger: The Question of Being and History. Chicago, University of Chicago Press.

[63] This concept of taken-for-granted-ness of language will be revisited in the Results/Discussion section of this thesis (AFA, Chapter 6, p156).

[64] This particular, limited, discussion of this aspect of Heidegger's ontological argument is offered apropos of the nature of the fundamental premise of this thesis – dis/connections of humans from nonhumans.

[65] The concept of a *metaphysics of presence* will be returned to in the Results and Discussion chapter.

To Derrida (1976; 1978) the existence of anything is always and forever dependent on/intimately tied to the idea of its opposite (its *Trace*) – that which is not present defines that which is present and without which it would be meaningless. He writes,

> This movement of the effacement of the trace has been, from Plato to Rousseau to Hegel, imposed upon writing in the narrow sense; the necessity of such a displacement may now be apparent. Writing is one of the representatives of the trace in general, it is not the trace itself. *The trace itself does not exist* (*To* exist is to be, be an entity, a being-present, *to on*)' (1976: 167).

Derrida is making the point here that traditional (Western) thinking has 'effaced'/erased the trace, has taken its 'being-present' and thus in this entrenched way of thinking, *'the trace itself does not exist'*. Thus, in the context of the construct of the human/nature, human/animal binary, nature and animal are erased.

Spivak, (1997:Loc 247) translating Derrida (1976), writes, '[t]he structure of the sign[66] is determined by the trace or track of that other which is forever absent'. Removing the privileging of the power granted through the use of the binary thus destabilises it – by recognising how this has been constructed and questioning its authority. In other words, challenging the binary exposes its weakness and thus removes its power.

In the above quote by Heidegger, he is suggesting that nothing can 'Be' or exist without human presence to understand its existence. Derrida argues that the term *human* is dependent on the concept of *nature*, or more specifically, *nonhuman,* to define it – that is, the concept 'human' is meaningless without the 'Trace' of the 'nonhuman'. In the above quote, Heidegger is underscoring the concept of the primacy of humans and thus the embedded hierarchical power structure in dominant western philosophical traditions, whereas Derrida is essentially re-uniting humans with the rest of nature by deconstructing and destabilising the human/nature binary and exposing the need for the one to define the other.

However, as Calarco (2008:15-53) reasons, Heidegger certainly did not neglect 'the question of the being of animal life' (pg. 17) and challenged the common acceptance of the $\frac{Human}{Nature}$ binary: 'Heidegger stresses that standard hierarchical evaluations of the

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[66] In this context, the 'sign' is textual but the idea of a 'text' can be expanded to encompass non-textual signs.

human-animal distinction are highly suspect' (pg. 21). Nonetheless, as Calarco further argues, ultimately, Heidegger did not fully develop his philosophical standpoint on the nature of Animal Being, and he remained fundamentally anthropocentric in his approach.

Along with a rejection of theological explanations for the origin of Being, Heidegger eschewed the premises of the empirical sciences – the measurability/calculability/'describe-ability' of things in order to explain them – to instead consider more closely the abstract aspects of human experience and the manner in which human beings interpret their existence and experiences and make meaning of their Being-in-the-world. For Heidegger, the understanding of what it is to 'be' (Being), or presence in the world, is the primary focus of phenomenology (Dowling, 2007:133; McConnell-Henry, Chapman et al, 2009; Watts, 2014: Loc 93).

Whereas Husserl's phenomenology required putting aside any '*temporio-spatial* awareness or judgments' (*epoché*) (McConnell-Henry, Chapman et al, 2009:11)], time and space were fundamental to Heidegger's philosophy. To Heidegger, context was crucially relevant: context determined how a being's existence was to be interpreted and it defined the experience for that being. Not only did he believe that spatial context was ultimately determining of understandings of Being-in-the-world, his concept of fluid time – how past experiences impinge on present and future experiences – was equally significant and also contextualised experiences. Context, then, shapes understanding, and how we understand/construct our reality is dependent on our experience of Being-in-the-world.

Contrary to Husserl's concept of bracketing, Heidegger argued that it is not possible to bracket/put aside presuppositions – a researcher is as much a part of the research as the participant. Dowling (2007:134), discussing hermeneutic phenomenological methodology, describes a reciprocal 'activity' taking place/occurring 'between pre-understanding and understanding'. McConnell-Henry, Chapman et al (2009:11) explain this 'feed-back loop', known as the '*hermeneutic circle*', as being demarcated/defined by the flow of information from the parts to the whole to the parts and so on, where knowledge moves from being constructed, deconstructed to reconstructed. As they explain, the researcher is provided with the details of the

participant's experience which they then read and re-read, looking from the surface level of the data to the sub-surface in order to find the less overt, hidden meanings. The purpose is ultimately to determine the participant's 'ontological perspective' (pg.11) of their own experiences thereby learning what has been the essence of the participant's experience. In the process, hidden assumptions and values are exposed. Expressing the hermeneutic circle in another way, we can say that the manner in which we interpret our experiences in the world will influence *how* we experience what we experience. This, in turn, guides how we will interpret our experiences, and so on: an always and endless process.

Critical Hermeneutic Inquiry

Lopez and Willis (2004:730) describe *critical hermeneutics* as 'a specialised application of the interpretive tradition in phenomenology' – that is, the phenomenology that has grown from the Heideggarian tradition. Underlying this approach is the supposition that all interpretation will always be influenced by the values and world views of the interpreter and the (overt and covert) commonly held 'socially accepted ways of viewing reality' (pg. 730) of the society in which the interpreter is embedded. However, socially accepted views are the dominant (and normalised) views and come to be thus through social processes (and embedded ideologies) which, as a consequence, create those in societies who are privileged and those who are excluded (Lopez and Willis 2004; Pease 2009). Following from this then, as Lopez and Willis (2004:730) argue, the voices of those who are not of the privileged group/s are less likely to be heard; '…the lived experiences and personal voices of persons who are not members of privileged groups are often discounted' (pg. 730).

It could well be argued that, despite the significant numbers of 'pet owners' (as noted in the previous chapter) in Australia, this group of people could be considered to be not of the 'privileged group' at times of disaster given the particular circumstances which shape their natural disaster experiences; during a disaster the focus is

[overwhelmingly] on the safety, rescue and accommodation of humans[67]. 'Pet owners' and their animals are, for the greatest part, bound by (or at the mercy of) the policies of government groups and most types of response groups. Indeed, without question under the dominant paradigm, nonhuman animals at large are of the excluded and 'other-ed' groups. This is one of the key types of issues to which Taylor and Hamilton (2014) refer when they discuss the possibility of MSE (mentioned previously in '*A case for pluralism*', page 81) coming to grips with in the cause for addressing the disparity in power between human and nonhuman animals. At this stage at least, animals remain voiceless, their choices limited and their lives directed by human whim and hubris.

The aims of a critical hermeneutic inquiry are several: to expose hidden/taken-for-granted cultural values and messages that impact on the experiences of individuals and groups – both the privileged and the excluded – and how these messages are created, dispersed, taken up and assimilated; creating awareness of how those preconceptions/prejudices, in turn, underpin and reinforce power imbalances/differentials – leading to the dominance by the more powerful over the less powerful; and, through the extension of awareness and the provision of possibilities, give a voice to the previously voiceless (Phillips and Brown 1993; Lopez and Willis 2004; Roberge 2011).

Lopez and Willis (2004:730-731) cite Stevens and Hall[68] (1992) who argue that critical awareness of their situation in relation to others, and of their oppression/disadvantage, by those who are excluded or marginalised leads to their ability to emancipate themselves and to 'find their voice' and be heard in a meaningful way. However, in the context of human societies and human constructed realities in particular, animals are unable to do this. Not only is there a need to provide the opportunity for disadvantaged human individuals and groups in the circumstances of natural disasters to be heard and their particular needs addressed,

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[67] And, indeed, the acceptance of the 'normalcy/rightness' of this is reflected in the responses of many participants in this project. This will be discussed in context of Derridean dualisms in Chapter 7/Disconnection.

[68] Stevens, P.E, & Hall, J M,(1992), Applying critical theories to nursing in communities, *Public Health Nursing*, *9*(1), 2-9.

there is the need to provide a voice for animals caught up in the 'cultural confines' of human societies at these times – by exposing the (socially constructed) 'mechanisms' that are at play in all the aspects of human cultures which serve to create and uphold an artificial and hierarchical division which subjugates, devalues and disenfranchises the excluded.

The key characteristics of a critical hermeneutic study then are to expose dominant belief systems or 'socially constructed systems of meaning' (Phillips and Brown 1993:1548), address the historical bases for such ideologies and offer an explanation of how these ideologies inform and direct everyday life.

This study draws on the key aspects of the methodological approach of a critical hermeneutic phenomenology to explore the lived experiences of the participants and reveal embedded belief systems that informed their decisions and actions made on behalf of animals during the times of natural disasters. This means not only presenting the *what* and *how* of their experiences, but also the offering of insights into the *why* of their decisions and actions; providing insights into their valuing of non-human animals, exposing underlying dominant ideologies, biases, hidden dualisms and the complexity of dichotomies at play [within and between people]. Czarniawska (2004, cited in Creswell 2013:186) suggests several deconstructive strategies for utilising in data analysis, including, *inter alia*, 'dismantling a dichotomy [and] exposing it as a false distinction' (pg.186); 'examining silences' (pg.186), and 'separating group-specific and more general sources of bias…' (pg.187): all strategies for exposing hidden biases and power imbalances between both individuals and groups. A Derridean deconstructionist approach (to be expanded on in the discussion in Chapter 7) will also be utilised in the discussion and analysis of the identified themes in order to explore the underlying assumptions bound up within the 'texts' of the participants' dialogues and actions. As Calarco and Atterton (2003:208) argue, 'deconstruction…opens the possibility of critically questioning all dogmas and discourses'. The philosophical stance of a critical hermeneutic phenomenology (which allows for deeper explorations) will be used in conjunction with a thematic analytical approach, employed specifically to organise the data and develop the themes for analysis in a rigorous manner.

The following section offers a description of the aforementioned thematic analytical approach (Thematic Analysis) and its mode of use to assist in the achieving of deeper understandings of the meanings that participants gave to their animals or their experiences with animals in times of disaster.

Thematic Analysis (TA)

Once interviews have been conducted and the dialogue transcribed, and in an effort to impose some order on a large and complex body of material, the (now) data needs to be arranged in a coherent and consistent manner to facilitate analysis. Thematic analysis (one analytic method among many employed in qualitative research projects) is a means of reading and reviewing the entire data corpus, identifying and extracting/marking the data items that will form the data set most pertinent to the study, followed by one or more re-readings of the data set to fully familiarise oneself with it and to discover meaningful (and usually recurrent) patterns. This leads to the determining of a set of codes under which to group/organize relevant portions of the data set and, in turn, to the development/collation of all of the codes into key overarching themes (and possibly sub-themes). These themes allow for the deeper description or analysis of topics/phenomena pertinent to the research study (Braun and Clarke 2006; Joffe 2012).

TA is one approach for systematically consolidating *what* participants are saying rather than *how* (more the realm of Discourse Analysis or even Narrative Analysis). Given that TA is not associated with, or bound to, any particular theoretical or epistemological perspective means it is flexible in relation to how it can be employed: it can allow for both inductive or deductive coding (or both), or for experientially/descriptive driven or interpretation focussed research (Braun and Clarke, 2006; Joffe, 2012). Themes can be identified at a manifest/semantic or latent level. While Braun & Clarke (2006:84) note that a 'thematic analysis typically focusses exclusively or primarily on one level' yet it is not necessarily as straight forward as that. Joffe (2012:209) states, '[t]hemes are …patterns of explicit and implicit content [and] …[o]ften one can identify a set of manifest themes, which point to a more latent level of meaning'. Braun and Clarke (2006:81) point out that TA can be an effective means of making visible the assumptions or suppositions inherent or buried in the data as well as clearly describing material/experiential

aspects that the data offers; 'thematic analysis can be a method which works both to reflect reality, and to unpick or unravel the surface of 'reality'.

Braun, Clarke and Rance (2015:Loc 3872) note there are numerous forms of TA. This particular project adopts the approach described by Braun and Clarke (2006, 2013), who outline a particular systematic, six step guiding process (listed in Table 4), using open-coding and theme development, to ensure a rigorous examination of the data and analysis. While the steps are listed in a linear fashion the process is iterative/recursive and reflexive, necessitating a constant traversing backwards and forwards through the various phases and a refining of each phase, in turn. As such, through actively engaging with the data and identifying patterns, there is an 'evolution' of sorts of the 'story' of the project to be found in the data and a honing of the direction of the analysis. The methods section, below (Section 4.3) of this thesis will offer a description how each of the stages/phases of a TA (as outlined in Table 4) have been conducted, in relation to this project. As noted previously, Braun and Clarke's (2006) model for conducting a TA was chosen in order to maintain control over a large and otherwise unwieldly data set.

Six-phase process for conducting a TA

1	**Familiarisation with the data**	Becoming fully immersed in the data by reading and re-reading
2	**Coding**	Important features of data relevant to research labelled (codes). Entire data set coded. Codes collated as well as relevant data extracts ready for next stages of analysis
3	**Searching for themes**	Collated data and codes examined to identify broader patterns/potential themes – collating data relevant to candidate themes, reviewing of viability of each candidate theme
4	**Reviewing themes**	Check nominated themes against data set to ensure they are pertinent to the research

		topic/question. Refining of themes – may mean splitting, combining or discarding
5	**Defining and naming themes**	Develop detailed analysis of each theme, work out scope and focus of each, the contribution of each to the overall topic and generate an informative name for each
6	**Writing up**	Weave together the analytic narrative and the data extracts and contextualise in relation to the existing literature

Table 4 The six-phase process for conducting a Thematic Analysis (Source: Adapted from Braun and Clarke, 2006 and 2013)

4.3 Methods

The following section outlines all the various steps undertaken in the evolution of this study – from the inception of the project to the direction of the final discussion of the results.

4.3.1 Thesis statement and Aims

As stated previously in the introduction, this project is founded on the following thesis:

During the conditions of extreme and atypical times of disaster events the ways humans are both connected and disconnected with nonhuman animals can be exposed and be challenged. This knowledge is sought for the broader purpose of contributing to better understanding, and improving, our relationships with nonhuman animals, more generally, as well as during times of natural disaster.

Aims

As noted in Chapter 1, centred on the accounts by participants about their experiences relating to nonhuman animals during times of disaster, this study has several aims, as listed below. One of these aims is intended to enable an exploration of the participant's actual, lived experiences, shedding light on the types of issues (in

the context of interactions with animals) they were faced with in these exceptional circumstances. Along with gaining insights into the more pragmatic aspects of human interactions with nonhumans during these circumstances, two further stated aims are to explore, a) whether such situations would reveal something of the deeper connections humans have with nonhumans and, b) investigate whether the participants' responses would reveal anything of more profound and 'systemic'/normative customs of valuing nonhuman animal life – and which create a sense of disconnection – and the possible consequences of these in such times. The aims are restated here:

> 1) To investigate the types of experiential issues in human-nonhuman interactions that might arise during times of natural disaster, such as the practicalities and logistics of evacuating with nonhumans.
> 2) To investigate what participants' responses might reveal about human connectedness with nonhumans during times of natural disaster.
> 3) To investigate what participants' responses might reveal about human disconnectedness from nonhumans during times of natural disaster.

4.3.2 Researcher background and context for study

Given the personal nature of this segment (researcher background) of the chapter I will be employing the use of first person. As a means of offering some context, I would like to recount what led me to be inspired to undertake this project. I do so, in part, to disclose any possible biases I may have as a result of my background and that may ultimately impact on any interpretations of the data that I make and in the shaping of the study, generally. Creswell (2013:216-217) offers insights into the value of reflexivity on the part of qualitative researchers: the value of being 'self-conscious' about one's own past experiences and how these might shape one's position, and thus, interpretations of the phenomena being studied. Contextualising will also provide insights into why I came to think such a project would be an interesting and worthwhile topic of research.

From being a little girl living rurally to becoming an adult urban dweller, I have long had a fascination and close association with numerous nonhuman beings: I shared my childhood with many different lizards, turtles, rabbits, dogs, cats, birds, frogs,

horses, cows, and so on… even sundry insects! Now, as an adult, I could not imagine being without a dog by my side. My animal companions are considered a part of my family and live inside my home. In fact, even in an era when it was far less common in society for this to be the case, our dogs, cats, lizards, frogs and birds were always welcome inside the family home. When we children were unwell my mother allowed us to have our pets on the bed as a special treat. She, and my grandparents, instilled a sense of the importance of kindness and respect for other beings (two legged and four!).

A focus on human-animal relationships in my undergraduate degree in environmental studies and in my honours degree no doubt stemmed from a sense of deeper connections with the natural world so encouraged in my younger years. Combining this with a growing concern about the issue of climate change, the predicted increased frequencies of natural disasters and the (general) vulnerability of animals – particularly those living in close association with human societies – began the stirrings of thoughts about the possibility of perhaps a PhD project somehow connecting these various areas. It was fully clarified when, at the time of the floods in eastern Australia, 2011, there appeared a particular image in the various media outlets of a man risking his own life to jump into flood waters to rescue a drowning kangaroo[69].

Spending some time researching aspects of human-animal relationships in times of disaster I discovered the dearth of literature on the topic. It seemed to me that better understanding this relationship at such times would ultimately lead to better accommodation of it and better disaster outcomes for human and nonhuman beings alike. The majority of the literature on human-animal relationships during natural disasters has come out of America, particularly since Hurricane Katrina. There are a growing number of papers being written in Australia and New Zealand with a primary focus on the more pragmatic aspects of dealing with the human-animal relationships and animal welfare at times of disasters. The relevant literature has

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[69] For stories and images about this incident see, for example,
http://www.brisbanetimes.com.au/environment/roo-rescuers-ordeal-brings-tears-20110325-1c9u0.html#ixzz33XDWTpy4 or http://www.qt.com.au/news/rescue-wins-hearts-/749430/

been discussed earlier in this thesis in the Literature Review section (Chapter 3). A key focus in this study is on the more profound aspects of such relationships at such times and in understanding more about what these particular, disaster, situations 'say' about human-nonhuman connections and disconnections – gaining more insights into how the way that humans value nonhumans impacts on decisions made on the behalf of nonhumans in times of crisis.

4.3.3 Study design

The case for conducting a qualitative study was offered at the beginning of this chapter as was a description of the methodological approach adopted in here. Situating this particular study within a phenomenological methodological approach allowed for the flexibility of conducting a critical hermeneutic analysis of the information that the participants in the study provided. Utilising a thematic analytical method as outlined previously provided a sound structure by which to organise the data and facilitate analysis and so fulfil the aims of the study as previously stated.

Certain objectives, necessary to arrive at the gathering of sufficient suitable data and the organisation of it, were clarified in the beginnings stages of the project and are listed here:

- Semi-structured interviews were conducted face-to-face, by phone or by email in order to gather information about people's experiences and interactions with non-human animals during disaster events.
- Information was extracted from a forum discussion on the broad topic of people's experiences with animals during times of disaster events.
- The data obtained from the interviews and the forum discussions was organised and synthesised into a spread sheet to allow for an exploration, and determination of, the key themes that arose from the various experiences and that would lead to a fulfilling of the aims of the study, as stated above at the start of the chapter.

Participant selection and data collection strategies

There are a number of steps to be undertaken before one can arrive at the data analysis stage. Decisions need to be made about, *inter alia*, where suitable participants might be found, how they will be approached, how they will be interviewed, how the information/interviews will be recorded and stored and what ethical responsibilities might need to be considered. Creswell's Data Collection Circle (2013:146), adapted and represented in Figure 6, below, seems particularly relevant to this study – the process was not a linear one as the initial call out for participants did not result in sufficient numbers necessary for a meaningful study and, with re-advertising and 'tweaking' the focus of the study along the way, the procedure was very much iterative, needing to be repeated several more times before such numbers were achieved.

(Figure 7 has been removed due to copyright restrictions)

Figure 7 The Data Collection Cycle (Source: Adapted from Creswell, 2013:146)

Initially, this study was to have had a more narrow focus. Once it became clear that insufficient numbers were responding to calls for participants, the focus was broadened, shifting from one seeking particular information, about people's disaster accommodation experiences with animals, to opening the study up in order to welcome participants who had more broad experiences with animals in disasters. The project then became, in large part, an examination of the embedded ways of how personal and social valuing of animals influences decisions made on their behalf during times of disaster, as well as an effort to glean insights into the more pragmatic issues faced by participants at these times.

The original focus on disaster accommodation experiences would have lent itself more obviously to a phenomenological (descriptive) methodology: specifically interviewing people who had experienced accessing, and being in, temporary accommodation/refuge with an animal. In this way, the common shared phenomenon would have been the experiencing of disaster accommodation. Once the focus was changed and opened up to a broader group of people with experiences with animals in disasters, the pathway for a phenomenology became less clear; a commonly shared 'phenomenon' became less obvious as responses were received from pet owners, emergency service and animal welfare personnel, a pet-related business owner and hunters. As the project evolved and took on a more tangential direction, and with much deliberation/reflection, it finally became evident that a phenomenological methodology (critical hermeneutic now) could still be adopted; it was possible to conceive of a more expansive (yet more fundamental) phenomenon which would relate to all the various participants' disaster 'episodes'. Despite these people having seemingly disparate backgrounds and types of experiences, there was an underlying commonality: they had all been in a position to act on behalf of/make decisions for non-human beings in a situation of disaster. Broadly put then, the phenomenon under investigation was defined as being that of human interactions with, and on behalf of, non-human animals in times of disasters.

Frith and Gleeson (2012:58) observe that, when conducting an interpretive phenomenology, the participants are seen as more than 'passive retainer[s] of…data': the interview process requires negotiation, interaction and reaction on the part of the researcher and the participant. Semi-structured, open-ended questions, rather than

structured/rigid, detailed interview schedules facilitate a reflexive process (on the part of both engaged in the interview) leading to a layering of the information passed and understandings of it. An awareness of such layering within the information and an interpreting of responses during an interview is an important function of an interpretive phenomenology and adds depth to interpretation during the data analysis stage.

Initially, a question sheet (to accompany the respective ethics approval forms) was designed with a series of open-ended questions for semi-structured interviews with 'pet owners'. These questions were meant to be a guide –as a personal/interviewer reminder (to ensure topics were not overlooked) and for the participants (as memory joggers or an indication of potential topics for discussion along with their recollections). The questions were aimed at gathering data about the owners' disaster evacuation and accommodation experiences, including whether they were refused accommodation and what alternatives they resorted to if so. Ultimately, as participants with experiences beyond the 'pets' and disaster accommodation issue were recruited, the question sheet/topic guide became redundant. At this point, after having supplied all participants with a formal information sheet (as per the ethics approval process and a sample of which can be found in Appendix B), the topic guide was no longer provided and unstructured interviews were opted for, allowing the participants' recounting of their experience to flow naturally. In order to engage with participants' telling of their narratives, relevant questions were asked of them or a prompting to explain more about aspects of their experiences was employed.

Recruitment of participants
As Vossler and Moller (2015:Loc 2012) note, purposeful sampling in qualitative research means deliberately choosing participants who have experiences which relate directly to the key issue/s being explored in a research project. The recruiting campaign was begun by placing specifically worded adverts in newspapers distributed in areas that had previously experienced a natural disaster and in pet related on-line forums. As the need to advertise more widely became obvious, additional ads were placed in various other places, including a national newspaper, radio advertising, online classified sites and a national pet magazine. Emails were also sent to a number of animal welfare organisations (after first contacting them

personally to seek approval) that they might advertise within their own organisations for willing participants. Sadly, while expressions of interest and encouragement were forth-coming from these organisations, volunteers to participate were not. Rather paradoxically, at some levels, the hunters, when approached in the same manner, were keen to offer their help and recount their disaster experiences.

At the start of recruiting, the hope was for a sample size of 20 to 25 participants and ultimately the study was completed with 18. In respect of the time restraints of the project, this number was a manageable size and provided adequate data for the purposes of code and theme development. The participants' experiences spanned numerous disasters across several decades but no effort was made in this study to draw a conclusion or comparison about what behavioural/attitudinal changes might have occurred over time. The 'throwing of a wide net' to recruit was chosen rather than focussing on one particular disaster, therefore the participants recounted experiences from various types of disasters around Australia. Doing so allowed for some gaining of insights into the particularities encountered during different types of disasters.

Once the participants had returned their consent forms an interview time, and type, was settled on. Three options were available for the facilitating of an interview: telephone interviewing (10), and face to face interviewing (5) (in which, along with taking handwritten notes, a voice recorder was used to ensure the complete conversation was available to refer to later), as well as email communication with three of the participants. The participants who opted for a face to face interview were given a choice of location for their interview and they opted for their homes (2) or their workplaces (3).

The comments from a thread on a public on-line forum[70] were also recorded and assimilated into the data. As the comments were collected and transferred to the data file the contributors were all de-identified. The forum topic centred on people's opinions about being put in the position of having to choose whether to leave animals behind, or not, during a disaster evacuation. It was chosen from among several

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[70] DOGZONLINE.COM.AU, 2014, Australian Pure Bred Dog Forums, 'How Do You Leave Them Behind' (http://www.dolforums.com.au/topic/212104-how-do-you-leave-them-behind/ available on line 26/9/2014)

similar on-line discussions on various forums as it had the largest number of contributions (over 100, and ran over a period of several days from Dec 29, 2010 to Jan 5, 2011) and it was felt that there would be a greater chance of a wider range of perspectives on the topic. There was also the opportunity to use the comments as a type of means for testing credibility (Creswell 2013:247) – was the feedback/opinion/feeling from any of my interviewees highly specific, unique or anomalous to that person or could it be of a wider/more general nature? Could these comments add anything new or confirm anything? Did the comments challenge the conclusions being made about participants' values and experiences or did they help to confirm them?

In a further attempt to obtain more data, or even participants, a questionnaire was set up on SurveyMonkey. Unfortunately, only a very limited number of responses were received and which did not lead to any significant contribution. These were not included in any subsequent analysis.

Ethical considerations

As interviews were to be conducted with people about personal aspects of their lives, it was essential to have approval from the university's ethics committee. Once this process was completed, consent forms were sent to each prospective participant, along with a letter of introduction (Appendix A) written by my supervisor and an information sheet (Appendix B) describing the study and outlining its purpose, and what would be expected of participants themselves. On the matter of ethics, Vossler and Moller (2015:Loc2002) draw attention to the fact that participants must be in a position to make an informed choice regarding their decision to take part in a research study. They also need to be assured of confidentiality and of any safety or likely trauma issues that may arise in the recounting of their experiences. As each interview was transcribed participants were de-identified to insure anonymity. They (and their animals, where named) were given aliases, or pseudonyms, and were referred to by these thenceforth. Once all interviews were transcribed and the names changed the original files were deleted.

Since the project was to be based on people's experiences during traumatic events contact information for counselling services was provided on the information sheet,

should any participants (or even prospective participants) have felt the need to speak to someone about any resurfacing of stress or anxiety in the recounting of their memories.

Transcription phase

The transcription phase of this project presented its own challenges. Lichtman (2013:Loc7749) observes some of the issues which can complicate the process of transcription of interviews, including the decisions that need to be made about the 'mechanics' of the process: whether to rely on voice recognition software to do the translating, adopt a 'listen-and-type' approach or even hire a person to transcribe.

Initially, due to some personal physical limitations at the time, the hiring of a service to do the transcribing was opted for. However, after spending some time checking the transcriptions against the original recordings numerous inaccuracies and omissions were found. There were even instances where the wrong word was typed, and which actually reversed the intended meaning. For instance, typing 'was' instead of 'wasn't' or vice versa. It became clear that the best option really was to persist with a 'listen-and-type' approach. Despite it being a very time consuming process, it aided in recall of the conversation, reinforced impressions, allowing the option of deciding to keep all the detail that the transcriber had omitted (such as hesitations, laughter, sobs, sections of dialogue that the transcriber must have deemed trivial, and pauses for recall or reflection) – all of which can lend to the depth of understanding and interpretation – and it increased familiarity with the content of the interview.

Data organisation and management

Despite acquiring a CAQDAS (Computer Assisted Qualitative Data AnalysiS) software programme (nVivo) the combination of Micrsoft Word and Excel was chosen. As Saldana (2013:26) observes,

> 'Trying to learn the basics of coding and qualitative data analysis simultaneously with the sometimes complex instructions and multiple functions of CAQDAS programs can be overwhelming for some, if not most.'

Overwhelming it was! After 'playing' with the software for several days it became obvious a disproportionate amount of time was being consumed in trying to master

it. Instead, software that was far more familiar[71] – Microsoft Word and Excel – was selected.

Once the interviews were transcribed into a Word document the 'Convert text to table' function was applied in order to begin to design a personal system of tabulating transcriptions – creating a table with sufficient columns to include the numbering of each cell, notes/memoing, first and second level coding and, lastly, a column for assigning themes. The 'first level' codes consisted of short descriptive sentences or phrases. The 'second level' was more refined and became reduced to a series of acronyms. This process equates to what Saldana (2013:3) terms 'First Cycle' and 'Second Cycle' coding. The notes column was also used to insert hyperlinks to relevant information to illustrate some of that which participants were describing and included news items, (informative) web sites, photos or links to video footage. Observations and first impressions were noted as were immediately obvious connections to the literature. Note was also made of questions that arose and which it was deemed may be pertinent to address in the analysis phase, along with writing down any ideas and insights that might have some practical application beyond this project. Some of the notes were simple 'memory joggers' or thought guides and others were more considered and ready to transfer directly into the discussion section. Reviewing each transcript it was clear that not everything that was said in the interview would be used as data. Creswell (2013:184) writes of "winnowing" the data – extracting (or 'mining') the comments most relevant to the study. Once the coding for all the transcripts was completed, an Excel spreadsheet was set up which allowed for the storing of all the selected suitable 'chunks' of data extracted from the tabulated versions along with the hyperlinks and graphics that had been recorded in these versions . The data 'chunks' were ordered by interview number and the relevant cell number from each table. This allowed for ease of crosschecking between the spreadsheet and the tabulated transcripts, collation of each of the codes, and, ultimately, the themes. At its completion the spreadsheet had a column each for segments/extracts from the interviews relating to experiences with/of animals, a column with notes and twenty six columns for the final codes. The spreadsheet was

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[71] To me!

over one thousand rows long (each cell a discrete record of the relevant extract, the notes pertaining to it and the recorded coding for that extract.

4.4 The six steps of a TA in practice

Adopting the six step approach as described by Braun and Clarke (2006), and previously presented in in Table 4, each interview was worked through in an iterative and reflexive process in order to arrive at a list of codes and themes on which to base an analysis that will be contextualised by data extracts and references to the existing literature in the discussion chapter.

Step 1: Familiarisation with data

After transcription, each interview was re-read while replaying the original voice recording. At the time of converting the transcription word documents into a tabulated format, they were read again as the decision was made regarding the placement of divisions within the text. Each division of text became a sequential entity, or cell, within the tabulated format of the transcript. The tabulated transcripts were then read and reread again as the coding process took place.

Step 2: generating initial codes

Saldana (2013:3,4) points out that, in qualitative analysis, codes are 'researcher generated constructs' assigned a meaning to enable pattern detection among/between the individual datum for the purposes of later categorization and analysis. The 'portions of data' to be coded is often a word or phrase but can also be paragraphs or longer pieces of texts (or images or sections of film/video). In this project, rather than notating and coding word by word or line by line, full sentences, or chunks of the data, were coded for the key content or ideas that they contained. All references to any aspect of a disaster experience, whether it was concerned with, *inter alia*, evacuating, temporary accommodation, participants' experiences with animals or even how participants or animals were affected, were selected for coding. Tentative codes were applied in the initial readings of each transcript and notes were made. With each successive reading of a transcript, the codes were refined within that document. At the start of the coding of the first transcript a separate 'Code List' was kept of codes as they were identified. For each transcript new codes were added to

this list, which, itself, was refined a number of times as the transcripts were worked through and as previous ones were reviewed, making adjustments and clarifications along the way. By the completion of the coding of the last transcript no new codes were identified. The final list of codes (in alphabetical order) is presented just below (Table 5). Due to the restriction of word limitations for the study, not all codes are discussed beyond a brief mention. The key codes are elaborated on in the Results/Discussion chapter (Chapter 4) in relation to the themes with which they are associated.

Code List

Code Label	Label in full	Key issues	Assigned theme
AAF	Animals as family	Implications for policy on animals in disaster, law, what defines a modern family, pets beyond human/animal dichotomy, grief issues	Connections =2
AAP	Animals as priority	Animals seen as equal in disaster evacuations	Connections =2
AB/IOA	Animal behaviour/Impact on animals	Impacts of disaster events on animal health and behaviour	Animals =Sub3
APP	Advanced planning and preparation	Negative and positive consequences around advanced disaster preparation or lack of	Experiential =1
AS	Animal size	The consequences of an animal's size in evacuation processes	Animals =Sub 3
ATA	Awareness through adversity	Learning from adversity, disaster events as 'focussing events'	Experiential =1
CBPFA	Cooperation between people for animals	Community members cooperating in securing the safety of others' animals	Connections =2
DL/DD	Divided loyalties/Disaster dilemmas	Dilemmas of choice faced in disaster situations when not all members of family can be evacuated	Connections =2
DOR	Defiance of restrictions	Defiance of officially imposed entry restrictions into disaster areas to rescue animals	Connections =2
ER	Emotional response	Biophilic connections and empathy at the suffering of animals	Connections =2
EVACC	Evacuations –	Issues regarding	Experiential =1

	centres/shelters	evacuation centres or shelters and animal acceptance or accommodation	
EVACP	Evacuations – processes	Practical, experiential aspects of evacuations	Experiential =1
EVACTA	Evacuations – temporary accommodation	Issue of temporary accommodation with animals, or where families have to be divided to be able to ensure the safety of their animals	Experiential =1
HF/P	Humans first/pragmatism	Anthropocentric attitudes regarding the priority of humans above animals	Disconnections =3
IOB	Importance of Bond (Impact on bond/Impact of bond)	Impact of disaster events on human/animal bonds and consequences of bond on disaster measures taken (including evacuations, RTL, DOR)	Connections =2
PD	Post disaster	Thoughts or suggestions for improvements post disaster	Post-Disaster Thoughts =Sub1
PE	Past experience	The influence of past experiences on people's behaviour in future events	Experiential =1
RLFA	Risking life for animals	Some people are prepared to put their own lives in jeopardy in order to save that of an animal with whom they have no personal connection	Connections =2
ROE	Rapid onset event	Some events are so rapid there is little or no time to conduct an organised evacuation and decisions must be made on the spot regarding who is evacuated and how	Experiential =1
RTL	Refusal to leave	Some people refuse to leave their homes without their animals and would rather risk their own safety in order to do so	Connections =2
S/DUAL	Silent Dualism	More deeply concealed/ embedded instances of dualistic attitudes to non-human life	Disconnections =3
SEV	Shooter's experiences and values	A group, who on face value, would seem to be	Disconnections =3

		the least likely to be affected by the taking of an animals' life demonstrate clear empathy for the suffering of animals and highlight the dualistic nature of human/animal relationships (both within and between people)	
STHA	Safe temporary housing for animals	Issues of providing safe accommodation for animals during and after events	Post-Disaster Thoughts =Sub1
TOAL	Taking of nonhuman animal life	Different circumstances to the shooters, but have still been in the position to take an animal's life in a disaster event	Disconnections =3
UOE	Unpredictability of events	The unpredictability of disaster events (as in the speed of rising water or the movement of a fire) can throw evacuation plans into chaos and mean last minute, hasty decisions need to made	Experiential =1
VOA	Vulnerability of animals	Animals, particularly those caught up in the dictates of human societies, can mostly exercise little choice about how, or if, they will evade a disaster and must rely on humans for their safety/survival	Animals =Sub 3

Table 5 List of Codes and brief description

Summary of Themes

Theme Number	Codes
1 (Experiential)	APP, ATA, EVACC, EVACP, EVACTA, PE, ROE, UOE,
Sub1 (Post Disaster Thoughts)	PD, STHA
2 (Connections)	AAF, AAP, CBPFA, DL/DD, DOR, ER, IOB, RLFA, RTL
3 (Disconnections)	HF/P,S/DUAL, SEV, TOAL
Sub3 (Nonhumans)	AS, VOA (AB/IOA - Appendix C)

Table 6 Summary of Themes and Associated Codes

Step 3: searching for themes amongst the codes

As the Code List evolved and with iterative readings and refining, it became clear that it could be organised around broad patterns or possible themes. While there were some concepts that were unique to particular interviews, there were also overlapping issues and fundamental, philosophically driven, considerations and concepts. Many of the codes related to experiential issues during natural disasters. Others clustered around more profound concepts of human/animal bonds and the more fundamental (biophilic) connections and the consequences for human-nonhuman relationships at such times, including grieving the loss of a 'companion animal' or situations of 'imposed' dilemmas where a choice had to be made about which lives to save. Yet more were pertinent to concepts of sociocultural influencing (disconnections) or conditioning (through the instilling of values) and the consequent impacts on the manner in which decisions were made for/on behalf of nonhumans in times of crisis. A smaller grouping of data lent itself to a potential theme relating to stories about the impacts of disasters on nonhuman behaviour and issues of their vulnerabilities at these times. An even smaller section of data was placed under codes relating to a) certain participants' style of description of their experiences and, b) language, including common words used in description (such as the repeated use of the word 'devastating'). While considered noteworthy at the time of creating codes, the decision was made, ultimately, to forgo pursuing this particular avenue of analysis as it was deemed not entirely pertinent to the original aims and more appropriate for a Content Analysis project.

In a small number of codes the boundary between potential themes appeared fluid. For example, the links between sociocultural influences on attitudes toward animals and the vulnerability of animals are, while being two distinct areas for discussion, intrinsically linked in most circumstances. The same could be said for instances of deep human-animal bonding (which can be a two-way thing) and the impinging of sociocultural values on this bond wherein, for example, (socially constructed) disaster management policy prevents/inhibits the ability of a person to retain constant contact with their bonded non-human animal.

 At this stage, however, three broad themes were allocated: **1**) practical issues to do with disaster events and evacuations; **2**) aspects of disaster situations which

exposed/highlighted deeper human connections with non-human life and, **3**) issues that were bound up in socio-culturally imposed values toward non-human life and that pointed to ways in which humans disconnect from nature/nonhuman animals.

Step 4: reviewing the themes

In this next step the potential themes were reconsidered (again, as per Braun and Clarke's 2006 model) as a whole and reviewed in context of the original aims of this project. It became clear that the three broad potential themes did indeed marry with the three key aims.

The first aim was stated thus: 'To investigate the types of experiential issues in human-nonhuman interactions that might arise during times of natural disaster, such as the practicalities and logistics of evacuating with nonhumans'. The first of the themes (Theme 1) encompassed the clustering of conceptually linked codes concerned with such issues of experience in disaster events as, planning, evacuation processes and emergency accommodation for humans and non-humans.

The second aim was stated thus: 'To investigate what participants' responses might reveal about human connectedness with nonhumans during times of natural disaster'.

The second theme (Theme 2) encompassed codes that were related to deeper, biophilic, connections between humans and other animals and what disaster situations reveal of these connections.

The third of the broadly defined themes (Theme 3) is concerned with issues surrounding systemic, socially/culturally shaped, valuing of non-human life and the ultimate consequences for non-humans. This aligns with the third stated aim, 'To investigate what participants' responses might reveal about human disconnectedness from nonhumans during times of natural disaster'.

Step 5: defining and naming the themes

Theme 1

The first of the broad themes draws together the more concrete aspects of disaster experiences. These aspects include such concepts as managing animals in evacuation

processes, lessons learned from adverse situations and the unexpected impacts of rapid and unpredictable events. Theme 1 was assigned the name **Experiential**.

The code Post Disaster (PD), originally deemed to fall under the broad theme of Experiential, was sectioned off into a *sub-theme* and given the name **Post Disaster Thoughts**. Reflections on disaster experiences and post disaster issues have some potential to shed light on some considerations or suggestions for future preparedness and this sub-theme concerns experiential issues directly relating to animals.

Theme 2

Theme 2 is a collation of all the codes which reflect the deeper, often hidden, connections humans have with non-human animals and can manifest in various types of human behaviours. Many times these behaviours are a direct consequence of personal bonds that humans have with particular animals. They can also reflect fundamental, more, biophilic, connections with non-human life at large. Such behaviours are not always necessarily propitious for the animals involved, as is the case for some of those animals whose lives are purposely taken by human actions during, or as a consequence of, a disaster event. The extent to which certain participants have been affected by these types of actions speaks to both the deeper connections humans have with non-human life and also, at the same time, the deeply ingrained dichotomous relationship with it.

Theme two was assigned the name, **Connections**. Some codes, such as Cooperation between people for animals (CBPFA) and Animals as family (AAF), while included under this theme, in reality move between this theme and Theme 3 in that sociocultural values impact (although they are not the only factor involved) on the types of decisions people make (or, even, are conditioned to make) regarding their responses to assist one another. The boundaries between the three major themes are particularly fluid for the codes Shooters experiences and values (SEV) and Taking of animal life (TOAL). There are pragmatic, experiential components to each of these codes and elements of sociocultural valuing and factors relating to fundamental human-animal relationships which are pertinent to all three. However, the codes placed under this theme overwhelmingly relate to Connections.

Drawn together under the third identified theme are codes which group opinions expressed by participants reflecting, more broadly, ways that humans value other-than-human life. Such ingrained ideals fundamentally determine the expectations and provisions for animals generally and, more particularly, in disaster scenarios.

These beliefs/ideals, revealed in actions and speech, expose many of the paradoxes and dualisms bound up in how animals are valued and the taken-for-granted assumptions about their moral worth and, therefore, the limits to what is generally deemed to be adequate in the provision for their needs.

While there are far fewer codes falling directly under this theme they are by no means less influential or in any way insignificant. Indeed, these codes, relating to humanity's dualistic relationship with the rest of nature, are among the key issues, fundamental in determining our actions toward animals, so deeply ingrained and possibly the most difficult to modify.

Theme 3 was assigned the name **Disconnections**. Two codes directly relating to animals Vulnerability of animals (VOA) and Animal size (AS) were originally loosely included in the third theme, as a component of the concept of the vulnerability of animals within human societies, but after revision of the theme they were considered to be unique enough to be part of a separate category and were sectioned off into a *sub-theme*. This sub-theme, named, **Nonhumans**, still shares strong ties with theme 3, as socio-culturally driven valuing has a fundamental influence on its very existence. The code Animal behaviour/impact on animals (AB/IOA) is presented in Appendix C, as it is anecdotal accounts of animal behaviour and beyond the scope of this project to discuss in any authoritative manner.

Step 6: the writing up phase

Now that the process of code and theme identification has been outlined the next step will be to expand and contextualise the concepts introduced above. This final step, appears in the next three chapters (Chapter 5/Theme 1, Chapter 6/Theme 2 and Chapter 7/Theme 3), provides relevant extracts taken from the various transcripts, in

order to afford context for each of the codes, as well as accompanying discussion of the codes and their associated themes.

An introductory note on the results and discussion chapters to follow

The purpose of this project is to seek more understanding about the ways that natural disasters impact on human-nonhuman relationships and to explore how the types of connections or disconnections people have with nonhuman nature might be evident at these times. The accounts from the participants in this study, and the linked discussion, provide insights which contribute to such understandings and add, specifically, to the body of knowledge of human-nonhuman relationships during times of disaster, and, more broadly, to existing knowledge in the field of human-animal interactions.

The following extracts from the transcripts, and accompanying descriptive commentary, are offered to contextualise each of the named codes. Given word limitations for this thesis, only the most salient extracts that overtly exhibit the crux of the code will be presented. The codes and supporting extracts, along with the associated discussion, will be organised under their relevant theme or sub-theme in the next three chapters of this thesis (Chapter 4 – Experiential/Theme 1; Chapter 5 – Connections/Theme 2; Chapter 6 – Disconnections/Theme 3). Purposely opting to present the results and the discussion together, rather than as two separate sections, is intended as a means of maintaining flow of discussion and avoiding unnecessary repetition. It also helps highlight the rationale behind the assigning of the themes. Table 7, below, is a list of participants, from whose interviews extracts were taken, and a brief summary of the types of disasters they were involved in.

Overview of participants, type of disaster experience and nonhumans affected

Name	Nonhuman/s affected	Disaster Experience
Tess	Horses and dogs	Peri-urban flooding event, airlifted, temporary accommodation
Bianca	Horses, dogs and cat	Peri-urban flooding event, remained in area, temporary accommodation
Karen	Horses, dogs and cat	Peri-urban flooding event, remained in area, temporary accommodation
Brooke	Seb the dog	Urban flooding event, self-evacuated to temporary accommodation
Barb	Nero and Teddy, the cats	Semi-urban fire event, self-evacuated, temporary accommodation
Casey	Dogs	Urban flooding event, pet business owner, business flooded
Kalia	Horse and dogs	Peri-urban flooding event, airlifted, temporary accommodation
Kim	Holly the dog	Rural flooding event, airlifted, temporary accommodation
Kate	Cats	Non-metropolitan fire event, did not evacuate

Lee		Town council employee, involved in disaster management
Nat	Opal the dog, Tilly the cat	Rural flooding event, airlifted, temporary accommodation
Tessa	Horse, dogs and cats	Non-metropolitan fire event, self-evacuated, temporary accommodation
Terence	Wildlife	Hunter, euthanizing of animals
Davis	Wildlife	Hunter, euthanizing of animals
Dan	Wildlife	Hunter, euthanizing of animals
Tyler	Dogs	Non-hunter, euthanizing of animals
Cole	Tabby the cat	Non-hunter, euthanizing of animal
Nataly	Dolly the dog	Rural flooding event, airlifted, temporary accommodation (washed downstream inside her house, with her husband and dog, before being rescued and airlifted)

Table 7 List of Participants, Disaster Type and Nonhumans Affected

5. THEME 1 – EXPERIENTIAL

'…institutional "thinking" reveals how the discourse and activities of a group or organization produce and reproduce characteristic definitions of and solutions to the problems within their scope.' (Irvine 2009:11)

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Natural disaster events present particular scenarios not generally encountered in non-disaster times, resulting in unique practical and strategic issues which require particular resolution. Such issues stand to be even more complex when human/nonhuman animal relationships are to be accommodated. The information gleaned from this study's participants will reinforce aspects of the current body of knowledge of these relationships during disaster events and will also provide other, distinctive, perspectives as provided by the participants.

The above quotation by Irvine (2009:11) points to the problem of 'institutional "thinking"' and of the need to break free from it – to think beyond the usual parameters to discover more adaptive solutions to problems. However, part of the ability to be able to do this lies in the amassing of as much information as possible about the issues to be resolved.

Each of the codes and relevant extracts in this section relate to the more practical/experiential aspects of the participants' disaster experiences. The examples are intended to provide further insights into the types of situations that can present themselves at such times and the manner in which they were dealt with in these particular circumstances. As such, they contribute to the fulfilment of Aim 1 of this project – *to investigate the types of experiential issues in human-nonhuman interactions that might arise during times of natural disaster, such as the practicalities and logistics of evacuating with nonhumans'*

5.1 Codes and extracts

Advanced planning and preparation (APP)

The importance of having an evacuation plan in place is underscored by several of the participants' experiences. Some had planned in advance and had taken at least

some measures to ensure the safety of their animals. Others thought they were well prepared but were surprised how poorly their plans worked in the reality and caprices of an actual event. While there is existing academic literature addressing the issue (see, in the Australian literature, for example, Dyer, Neller et al. 2001; Thompson 2013; Pawsey 2015; Taylor, McCarthy et al. 2015; Trigg, Thompson et al. 2015) and various organisations (for example, the Royal Society for the Prevention of Cruelty to Animals [RSPCA] and Animal Welfare League Australia [AWLA][72]) stressing the significance of pre-planning and providing advice, the input from the participants emphasises this and provides insights into some of the complications that can hamper a safe and successful evacuation.

Barb[73] recalls the conversation with her daughter and the last-minute decision about what to do with their cats at the time of evacuating from a fire event:

…she gets to the house and she rings me and says 'What about the cats? What are we going to do with these two cats?'… I said…at first of all…I said, 'Maybe put them in the garage. Maybe lock them in the garage.' That was the first thing I said …when I had this conversation…and then she said 'Well, I've grabbed a few things …and (name) is in the car…' …and I then actually said…'Get the pet packs and put the cats in the car'. I didn't know what she was going to do with two cats packed…but I actually said 'Put them in the pet packs and put them in the car'…So, without hesitation, she's now put them in the car… (Ex 24/25[74])

Barb's first thought was to lock the cats in the garage. However, they would have still been potentially vulnerable in such circumstances – if not to the possibility of the garage burning down, then at least to smoke and heat. Not having had a prior clear plan for the cats, meant further stress was added to the situation by needing to make last minute decisions about them. The final decision was actually a logical one and it was fortuitous in that the cats already had transport cages available and easily located.

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[72] For example, RSPCA Victoria's website 'Emergency Planning (http://rspcavic.org/services/emergency-assistance/emergency-planning/) and Animal Welfare League Australia "Pets in Emergencies" (http://www.awla.com.au/pets-in-emergencies/)
[73] Participants' names (and their animals' names) have been changed.
[74] All extracts are identified by their Excel (Ex) spread sheet cell number for cross-referencing purposes.

…and the decision to evacuate the cats was made emotionally and on the spur of the moment…it was that last second thing…'What do I do?' and I couldn't leave them…(Ex 44)

Barb admits that it was a 'spur of the moment' decision to evacuate her cats and that it was made based on emotions and her attachment to her cats rather than reasoned thinking. She states, 'I couldn't leave them' – leaving them behind was not an option for her. Such an insight speaks to the intersection of attachments/bonds with animals and evacuation decisions and to which some (see, for example, Leonard & Scammon, 2007; Thompson, 2013) refer to in context of improving evacuation successes through the exploitation of human-pet bonds, in a utilitarian/functional management approach: acknowledging such bonds and incorporating them into emergency management plans and procedures in order to increase likelihood of earlier evacuations if people know they will be able to have their animals with them. This could also reduce likelihood of people returning (unsafely) to rescue animals that they have been forced to leave behind.

Adequate warning from authorities is also a contentious issue for some of the participants. Advanced warning intimately links with planning and preparation – despite late warnings, or in the event of a rapid on-set event, it might still be possible to make a safe evacuation if appropriate pre-planning has been undertaken. If late or little warning couples with poor or no planning then it is much more likely to lead to an unsuccessful evacuation.

While Tess points out that,

…horses are … hard to move in an emergency… You can't just ring someone up and say "Go and pick up the horses", they have to have a float and know how to handle them… (Ex78),

…and that she had adequate plans in place, she was convinced that authorities had miscalculated the early warning signs of a flooding event and left her district with little or no advanced warning to evacuate:

…I can tell you, as I said, if we would have been told … you have got about two or three days grace for the water to come down from (place name) *to here … so if we*

would have been told that this flood is coming and there's a risk that it's going to be bigger than the last one, we would have had those horses on that float and out of here… (Ex 152), and,

…it was too late and a lot of people, we were annoyed too, you do get annoyed. You get annoyed when we sit there and think a lot of you people could have got out but they didn't. They weren't told to evacuate. It's like we couldn't evacuate and I have confirmation from the XX Police Service … that even when the first evacuation orders for (place name) *were given… the XX Police Service confirmed to the Premier it was very unlikely that we would have been able to get out, that we were already locked in… there was also a flippancy as well with the authorities afterwards, that "no, we put out evacuation warnings" and it's like "if you put out an evacuation warning for* (place name) *and people live out at* (place name)*, X kilometres away", serious! You know that's what they are saying and it was too late for us anyway. By the time we had the first evacuation order … the town … we were already well and truly locked in by about three hours…* (Ex 156)

Tess was strongly of the opinion that the advanced warnings did not extend, not only soon enough, but far enough, to the outer communities and that even when the first warnings went out to her district it was probably too late anyway.

Similarly, in a separate, urban, flooding event, Brooke recalls:

… yeah… I mean I didn't really get my…we could have reacted quicker than we did, that is for sure ...we were expecting to be told… to evacuate and we weren't at that point. Our street was the first street in the western suburbs to go under, but there was certainly no information that got to us personally. ...personally… until the policemen in the boats telling us that we had to go and that the house would probably be going to go under (Ex 328)

After reflecting, Brooke concedes they could have reacted more quickly than they did, but that they really did not get enough warning. It wasn't until the police were coming around in boats (and the water was already high enough for this) that they realized that the situation was actually quite serious. More effective advanced warning would certainly have made a difference. As she notes, '…if you had more

warning you could maybe put your pet somewhere' (Ex 329). Certainly, in the case of rapid onset events there may not be the possibility to offer much in the way of advanced warning.

Also having experienced an urban flooding event, Casey, likewise, recounted that she and her husband had received no information: '…there was no information, no-one had been given any flood maps, no-one had been given anything and I was being overly cautious'(Ex 339).

Tessa: *Yeah, look in hindsight we realised we were so ill-prepared, we thought we were very prepared for bushfire. We followed all the guidelines and had the CFA out and everything but with hindsight what was coming, we were not prepared for…* (Ex 678)*… We had at the time a horse… so we had a horse out in the paddock …hadn't even thought about him or done any preparation for him other than we did have nice cleared paddocks and I'm guessing that the gates would have been open…* (Ex 680*)… from that summer… with the subsequent summers we were set up ready to go…we didn't ever have to… we didn't ever get a day like that again, thank God. At least we were prepared. That was something I learned from it… you need to have a plan for your pets as well as yourself* (Ex 708

Tessa's realisation drives home an important point: when animals depend on their PICs (Person/s in Care) for their very existence and safety they must be included in safety plans. In Tessa's situation, basic plans had been established but the conditions had been grossly underestimated and not all of the steps of the plan had been acted on. This oversight left the horse even more vulnerable. In the stress of the moment, in that particular incident, priority was given to saving the home and the human family members only. For Tessa, this experience was a 'focussing event' (to be expanded on in Awareness Through Adversity (ATA, page 126) in that it forced her to consider more closely the needs of her animals and in a subsequent event they were given a higher priority.

An important lesson from Tessa's experience is the value of not just having a plan in place beforehand, but one which has unambiguous steps that can be followed as step-wise as possible to reasonably ensure the well-being of *all* dependant beings. Such crucial planning, and given reasonable time to react, can potentially remove some of

the otherwise likely ad hoc, ill-considered actions (or omissions to act) that might occur in the chaos of such a moment.

Kim draws attention to the important fact that it is not only individual planning that needs to take place but also community planning:

…see, there's no other like community building except the (place name)*, which is across the railway line. Now, we were told to... anyway, they got in and they said everyone had to go over to the* (place name)*, which is across the railway line on the other side of town because they couldn't get any helicopters to land this side. So… everyone packed up… bloody dogs and everything under our arms… and leads… where we could get clear ground… walked into town and of course the water had come up that fast you couldn't get across the railway line… it was flooded, so you couldn't get to the other side* (Ex 471).

At this stage, the attempt to evacuate the residents and their animals was occurring in the dark of the early hours of the morning. The apprehension of what might be in the water and the inability to clearly see where they were placing their feet heightened the tension of the experience. There were limited options in the town with regard to public buildings or spaces that were high enough for people to gather at and freely bring their animals – of which there were numerous:

…of course, everyone had…I mean… we are talking bloody dogs, cats… there was horses at the school … there was a pig… big black pig on the land of the school house that somebody had brought down…(Ex 450).

After traversing back through the flood waters to the school and having been informed that they would not be allowed to bring their animals with them aboard any rescue craft, the residents tried to secure their animals in the school buildings:

…so anyway, what we ended up doing was eventually tying the animals up in the school rooms…our Holly tied up to a desk … and of course we had no food for them or anything, not even thinking… (Ex 453) *… And that was the other thing too… I've got Holly… because I couldn't put her down….you know … just for the dogs to have a wee… trying to get them on to a bit of dry ground… which you'd have to come down from the school, walk through water and then walk up into town and try and let*

them do their business…and then when we got back… you couldn't even walk… it was just so much mud and slush… and there was nowhere… I'm trying to walk and hanging on with her under my arm… (Ex 480)

A lack of a confirmed, pre-designated or pre-prepared space meant increased vulnerability for the residents and for their animals. Such disorder and poorly appointed resources can only add to an already stressful and chaotic situation and hamper community resilience potential (Norris, Stevens et al. 2008). Not having a town evacuation plan in place at the time of the event meant that it was difficult to meet even some of the most basic needs – of residents and of their animals. The evacuation process was an ad hoc affair and the school was an unofficial last minute choice for an evacuation centre. Class rooms, understandably, were not set up to cater for the animals' food, water and toileting' needs.

Nat recounts a similar situation to Kim's, in which a town hall was opened up as a temporary shelter. It had been used previously for limited amounts of time (hours) as a shelter in fire events, but at the time of a major flooding event it was used for considerably longer and there were minimal facilities:

…the phone call was made to the lady who's the hall coordinator and she opened it up. It's been opened up before when there's been fires but that's only been for a few hours, you know what I mean? But that hall was open for five or six weeks after the fact (Ex 615) *…we were just on the floor with a blanket, like no mattresses, there was no showers, not much food because they said no-one was prepared for it at all…*(Ex 608) and *… a lot of people had their animals and they are family* (Ex 607)

Nat's final comment above is significant (and echoes Kim's experience): it points to the numbers of people seeking shelter with nonhuman *family members*. Also clear then is the need to cater, at least in some rudimentary way, for the needs of nonhuman evacuees in these circumstances – some basic dry food, water and a place to toilet.

Preparation and planning need to take place far enough in advance of peak disaster seasons in order that (at family and at community levels) meetings to discuss needs and logistics, or that rehearsals and/or practice runs and refinements, can take place

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where possible. Additionally, planning needs to encompass the sourcing of necessary resources, including appropriate facilities, emergency staff, funding where possible and other material resources that are likely to be needed. As Heath and Linnabary (2015: 175) note,

> During an active planning process, stakeholders have the opportunity to work side by side on problem solving and get to know each other and the community long before disaster strikes and in ways that are beneficial to the response to a disaster.

They further add (p183),

> Communities that have not engaged in appropriate planning or mitigation for the needs of animals and their owners in disasters often find themselves without a qualified or experienced person overseeing animal issues during the response to a disaster, and, therefore, *animal issues are predictably disregarded by emergency management officials during a response* (Italics added).

That 'animal issues are predictably disregarded by emergency management officials during a response' if no prior conscious effort is made for them in the planning process underscores the dominant human-centric philosophy that currently underpins emergency management policy. While Heath and Linnabary (2015) are writing from a US perspective, Every, Due *et al* (2016) point to a similar sentiment currently driving emergency management policy development and practice here in Australia. Similarly in New Zealand, Darroch and Adamson (2016) point to the largely unchallenged distinction between human and nonhuman needs and services[75] in disasters, based on entrenched philosophies of human pre-eminence. Such thinking not only overlooks the importance of animals in people's lives or their inclusion as valued family members, but is utterly dismissive of animals' own intrinsic worth or, even more fundamentally, their right-to-be in this world.

Awareness through adversity (ATA)

While at first it would seem incongruous that something positive could come from disaster events they can, in fact, lead to modifications in both individual behaviours and community planning and amelioration strategies. Birkland (1996,1998) writes of disasters being 'focussing events' and 'potential triggers for policy change' (1998:53) in context of public policy making. Focussing events can thus challenge

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[75] Indeed, the participants in this study were asked whether any specific services were offered to them on behalf of their animals. Other than instances of individual veterinarians providing free services for a time or, for one or two, a one-time-only donation of free animal food, no-one was offered any other service of any kind.

normative, previously accepted ways of valuing and drive social change for the better. It could, however, be argued that such a process operates at the level of individuals as well as politically organised groups: living through the actual experience of a disaster event can more sharply focus the individual mind and provide greater insights into how behaviours can be reformed/adapted, leading to better outcomes in personal planning strategies for future events. Many of the participants disclosed how they learned from their experiences and what they would do in any future events. Some reveal how their experiences caused them to reassess or transform the way they considered nonhuman life.

Barb: *I think having gone through that experience it…it's in the back…no not the back, it's in the front of my mind now…about what I'd have to do … Because we've gone through floods here…I'm not in a flood prone area…but certainly we have horrific storms and that…I've got a good idea now what I would have to do…* (Ex 58), and,

…Yeah…and so I think you have to have …I think you've got to have some sort of plan in place…and for anyone who hasn't been through floods or bushfires or anything like we went through…the firestorm in (place name) *…they aren't necessarily going to be thinking that way…you know…* (Ex 62) *…yeah…I just wouldn't leave them behind now* (her cats) *…* (Ex 63) *…I'd no more walk out of here without them than…[laughs]…you know… it just wouldn't occur to me now…* (Ex 64) *… I think it's about how you value life and I …And I think I've become…over the last ten years or so …become even more…anti-speciesism…in that life is life is life…it's not about us being any better that animal life…*(Ex 66)

Barb used the word 'now' several times in regard to what her priorities would be toward her cats. It seemed as though she was underscoring or confirming the concept in her own mind as well as relating the details. Possibly this was a shift in values or, more likely here, an awareness of something not previously overtly confronted/considered. Experiencing a disaster event quite probably means having to experience relationships in ways not usually faced. This has the potential to both, deepen, or challenge, already held convictions that are perhaps not previously consciously expressed. Such insights may even come as a surprise. Barb appears to

care very much about her cats, but by repeatedly using the word 'now' in this context (and in the reflective manner in which she was recalling her experience at the time of the interview) she seems to suggest that it was only after living through the experience that she was fully aware that there would be no question that they would be a priority to her. For Barb, her experience focussed and strengthened an already held philosophical stance toward non-human life: that all life has value.

Kim's experience prompted her to think about how she could be better prepared in a future event. Obtaining a safe carry container for her small dog would be acceptable should she need to access a public evacuation space in the future.

Kim: *The camps are okay with people having cages. I guess that's another thing too, I suppose, I could do. Get one of those carry things…* (Ex 476) and,

I think actually just talking about it the other day, because with the wet season coming on again I think this time I would probably pack the car, you know, well… I've got an evacuation kit ready with dry dog food and all that and water and probably just sit in our cars up at the high end of town where it's dry and just stay there with our animals, I think. Of course, if we had to leave like last time, well I mean you've got to leave… (Ex 488)

Dan is a shooter and was involved in the *pis aller* (as defined, pp. 9, 216) shooting of injured animals after a major fire. He was so affected by the plight of the injured animals he found that it awoke deeper levels of compassion and respect for non-human life.

Dan: *So it's put a whole new light on the way I hunt these days. It makes it more personal and it's certainly makes you, I think, have a greater empathy for the animals themselves* (Ex 819)*…and yeah …I thought I was pretty tough. I've spent 15 years in the army and I've been a farmer and all those sorts of things and I've hunted all my life and I'm not exactly a youngster anymore, and it really did affect me a great deal. So I think you'll find that a fairly common thing to most of the people (involved). Some of them won't admit it…* (Ex 820)*… so they're the sort of things that I think will probably just linger forever…* (Ex 830)*… not that it's affecting us to*

the point where we can't handle it, but it's just that it's deeply embedded, you know…
(Ex 831)

Terence is also a shooter and was also involved in the *pis aller* shooting of injured animals after a major fire. Working side-by-side in co-ordination with a wildlife organisation led to his gaining of respect for the work that they do and to his willingness to assist them in future need.

Terence: *…….my views of the people that make up* (wildlife organisation) *or those sorts of groups ….was changed because of that exposure… to them. I know a couple of ladies who are actually friends… that ring us now, when there is something that they need doing…* (Ex 761)

Lee, employed in local government, relates how such organisations can grow and learn (from community management perspectives): *…so even though the event, itself…was a… I guess… wasn't as large scale* (as a previous event)*, there had been a number of things that had been put in place by that time to deal with the potential influx of animals …from whatever source they may come from… as well as trying to deal with pet owners and maintain a continuum with animal management services* (Ex 533)*…we have been lucky enough to go to a couple of the AIAM* (Australian Institute of Animal Management) *conferences the last couple of years and obviously there has been quite a lot of work done around the staff and management in terms of pets… from … Katrina and quite a lot of material obviously published on that, so when we are looking at flood sub-plans for our disaster management they are certainly things that have been looked at, some of those problems and issues there* (Ex 548)

Adversity provides the opportunity for the extension of awareness and progressive transformation/modification of behaviours, in individuals as well as groups – disaster events becoming what Birkland (1996, 1998) names 'focussing events'. Such circumstances allow for an awareness of the need for more inclusive (of nonhumans as well as humans) strategies, at all organisational levels as well as individually, when planning for future disaster situations.

Past Experiences (PE)

Just as previous disaster experiences can be triggers for change, there are times when they can lead to a false sense of security, or even complacency, particularly when coupled with conservative/underestimated predictions for the potential hazards.

Kalia: *So we live on the river in* (place name)*… and two years previously we've had floods in* (place name) *and the water hasn't …the river hasn't come up even up to our house. We knew that the next-door neighbour had lake levels so we knew what level our house was and it seemed ridiculous that water would come to that height* (Ex 359)

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Tess: *We decided that because our property didn't flood the previous flood event and it was being well predicted below that, that we would be fine to sit it out. We weren't expecting any water at all on our property…* (Ex 81)

Complacency was an issue in Darwin at the time of Cyclone Tracy (1974):

Tyler: *I was staying with my aunt and uncle…and …like everybody in Darwin …there were lots of cyclone warnings leading up to Christmas…and these kind of came and went, came and went…so by the time Tracy happened you kind of went…'oh, well…it's just another one of those* (Ex 845*)… no…no…no pets and things* (on whether they had pets with them in their post-disaster accommodation)*…like…see …no one thought it was going to hit…by the time you kind of went…'oh…'…it was almost too late…* (Ex 859)*… like our neighbours had …I can't remember what they were …I'm thinking cockatoos…but probably not, up there…in cages… they found the cages…but no birds in them…they were still locked…the birds had been blown out …* (Ex 860)

Tyler's comment not only tells of how the repeated 'false alarm' cyclone warnings conditioned the residents to not take them as seriously as they should have, but also reveals a certain complacency with regard to the welfare of their animals. Hosey and Melfi (2014), reviewing the literature of human-animal interactions across the last several decades, note changes in perceptions of these interactions and a growing

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acknowledgment/acceptance of the closeness of relationships with companion animals. Similarly, Knight (2010 on line) writes of the closer physical proximity in which we now live with our companion animals. At the time of Tracy (1974), reflecting prevailing attitudes to the status of 'pets' (as they were more commonly referred to then) within households, it was less commonplace for them to be kept inside (in contrast to the current status of most companion animals). By the time people reacted to the seriousness of the final warning it was already too late for numbers of them.

Rapid onset events (ROE) and Unpredictability of events (UOE)

Not only can disaster events strike rapidly and unexpectedly (ROE) they can be very unpredictable in nature (UOE), with situations arising that can be difficult to foresee. The powerful and erosive action of water can change a landscape within minutes. Similarly, a sudden change in wind direction or force can alter the path of a fire instantly, and tracts of land that may have been thought safe moments before can be consumed in minutes.

Tess: *We weren't expecting any water at all on our property* (Ex 81)…*but the horses were already standing … there was nowhere in the paddock where they could stand that didn't have water in it. They were standing in about a half a foot of water in the area they were* (Ex 86)…*but I had to go up and I had to...like the horses we had, we had horse jumps and everything out in that paddock and barrels and all stuff that you have for sporting events and things. Of course, that was all floating and even though the horses were used to jumping over these things and bending around them, they are not used to them floating past them* (Ex 87)… *then… in the course of that the whole house was now surrounded by water… but the levee bank exploded just to the left of the house… about 50 metres from the front of the house to the left…the pressure of the water and a weakening bank made the levee explode. All of a sudden you had the whole* (name) *River pouring in about 100 metres from the house …and the pressure that was kept then made the rest of it explode towards the house* (Ex 91)

Tess's situation illustrates several issues: the unexpectedly high levels of water (not predicted); the unpredictable course and the unexpected force of the water and the ensuing collapsing of the levee (where the horses were taking 'refuge'), each of these

factors adding to the vulnerability of the horses; the rising water having 'unmounted' heavy objects such as horse jumps and barrels, creating hazardous objects in the water which could have led to serious injuries to Tess and her horses. Additionally, not only was it possible for the horses to be injured due to collision with the objects, but also through their taking flight due to their fear of the 'unknown' floating 'things' in the water. As it was, while two of the three horses managed to swim to a higher parcel of land, the third one (with a fear of water) drowned.

Kalia: *The obstacles…yeah… as I said, wheelbarrows… or like our firewood… we had big logs of firewood… yeah… they were just shooting like rockets down the river…you'd have no idea of what was underneath…people's senses, whatever, you would have had no idea what was there* (Ex 415)*… and you heard stories of their horses trying to climb up the river bank. Like, one horse was apparently trying to climb up into … it ended up trying to climb up where a swimming pool was… things like that. But they get…sadly… injured… things like that …* (Ex 433)

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Nat: *Yeah and, see, some people couldn't take their animals because they'd already passed... because they got drowned in the event. The backyard…the water came too fast… they couldn't get the dogs or the horses, you know, whatever…* (Ex 624)

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Terrence: *We went into one gully system out the back of* (place name) *and I found the skeletons of probably thirty kangaroos that had gone up into the top of the gully system and the fire has just come through and stripped all the air out of that area …and they were… there was nothing left of them … it was just bones …and there were all different sized animals …big buck roos…all the way down through the grey flyers and the little ones … and that's where they had gone for protection and they…didn't last[76]…*(Ex 733)

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[76] Interestingly, Terence was the most pragmatic in his accounting of his experience but used euphemisms for nonhuman death more frequently than the other hunters.

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Nataly: *On Jan 10 2011 [o]ur house was dragged off the concrete supports and we were moved almost a mile in water that was clocked at 83kms a hour!* (Ex 891)… *Dolly* (the dog) *was on our dining room table which my husband and I were also hanging on to* (Ex 892)…*When we finally stopped we were up to 8 ft high in water and on top of 2 cars* (Ex 893)

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Kim: *And you don't know where you're walking, if you're going down off the gutter, you don't know what you're doing because it's dark and I was thinking "Oh my God"…yeah… so fast…just incredible* (Ex 495)

The following comment was extracted from a contribution to a thread on a forum site, dedicated to dog related issues, in which contributors were expressing opinions about various circumstances surrounding disaster events

Forum comment[77]: *To those people who are saying everyone had fair warning. I don't know how it was in other towns, but in* (place name) *my uncle's cattle are stranded and may even be washed away if it gets over 9.5m The reason for this is he was going by the official warnings of an 8.5m flood. They would have been fine at this level. But overnight the warnings were changed to 9.5m (HUGE difference) and by the time those revised warnings came out, nobody could get to the cattle. It's not through a lack of planning or anything like that. It's nobody's fault. It's just that the flood was so unpredictable that even people listening to the warnings and doing everything right still weren't fully prepared. Those giving the warnings were doing the best they could with the information they had* (Ex 1042)

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[77] All 'Forum Comment' extracts in this study were sourced from DogzONLINE.com.au, 'Australian Pure Bred Dog Forums-Dogz OnLINE: How Do You Leave Them Behind', http://www.dolforums.com.au/topic/212104-how-do-you-leave-them-behind/ available 26/9/2014

Evacuations: processes (EVACP), centres (EVACC) and temporary accommodation (EVACTA)

The following extracts offer insights into issues and complications associated with evacuations (during and immediately following). Companion animal person/s in care (PICs) face specific circumstances when they need to evacuate (forced or otherwise), including whether their animal[s] will be allowed to join them in the evacuation or the evacuation shelter, or whether they will be allowed to stay with them in temporary accommodation and, if not, where *will* their nonhumans be able to stay? Many of the issues are interlinked but the extracts have been grouped in an attempt to delineate specific stages of evacuating.

Evacuation processes (EVACP)

Tess: *We were on a winch that just went under your armpits…there was just a loop…they had so many people to pick up and I suppose we wouldn't really want a couple of red cattle dogs running around in the middle of the chopper, especially the unfriendly one…* (Ex 146)*… but… how …would we get the dogs up on the roof here… and… yeah…* (Ex 148)*… but to be honest with you… we had to wait five, six hours to get rescued… and we have got a very good vantage point here for everything… and we were sitting here and we were watching the choppers in the distance…they just kept going… they were all over constantly flying, stopping, picking people up, obviously….there was this constant thing…* (Ex 149), and,

I think what might be interesting too, like in my case, as I said, we left but then my horses were essentially evacuated separately …once the river had gone down … by other people. (name) *and* (name) *came and took them and took them to that big horse paddock …which was a horse paddock evacuation centre basically … for people who were still nearby but also for those of us who were elsewhere…again, we had to rely on basically a separate evacuation system for our pets…that was after the flood…* (Ex 158) *… when you have got no fences or anything left… and you are not here… you can't physically get back home… someone else has to come in on our behalf and take our animals and look after them…*(Ex 159)

Essentially, Tess was powerless to do any else for her animals once the situation reached the point that she and her son needed to be evacuated from the roof of their

house, where they were winched into a helicopter, in a process that unambiguously excluded non-humans – a human-centric process that Irvine [US] (2009) and Every *et* al [Australia] (2016) acknowledge is usual. From that point on Tess relied on people who were still on the same side of the river and who were able to access her horses and take them to safety – and even then this could not be done until after the flooding had subsided. This meant that the horses were left to their own devices for several days and, had they been injured, would have had to endure that time without medical attention (and potentially, clean water and food). The sense of frustration at needing to rely on others, her own vulnerability and the understanding of the vulnerability of her animals in these circumstances, is reflected in her words and was also in her delivery of them.

Kalia: *Then we had to go to the next house, next door, where there was no-one home, so we climbed on their roof.   ... I had broken my foot and dislocated my knee a couple of months previously so I had been in a moon boot up until... I was still using a moon boot for uneven ground and that sort of thing* (Ex 372) *... anyway... we got up on the roof of the next house with the two dogs... who were calm up there and all that sort of thing* (Ex 373) *… and when we got the rescue chopper from Townsville ...and my daughter got lifted up first ... two said yes to the dogs and two said no... and they wouldn't take the dogs* (Ex 374) *… I should have said* (person) *… at the time... he was with us too... so he had to get ...they gave him two minutes to get down ...get the dogs somewhere else and get back up on the roof* (Ex 375) *…so he had to ... they are 20 kg dogs... so he had to get down the ladder with two dogs ...* (Ex 376) *… take them back to the people we were with before... who didn't plan to leave because they had a deaf/blind dog that they wouldn't ... they said they weren't going to leave* (Ex 377) *… so we were choppered out but...yeah... had to leave the dogs and the horses* (Ex 379) *…like we heard later ... see, some people were allowed to take their dogs depending on which chopper you got....*(Ex 380), and,

...and there was some ridiculous thing ... I know... like people were evacuated from those residential accommodations, sort of like high density ... older people's units ... and they would be allowed to, say, take their dog in a boat ... but then when they got to the bus they weren't allowed to take the dog on the bus, that sort of thing...so they

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got part-way… and then they are like "Oh no, you can't take them any more" sort of thing….it was just a lot of silly things going on… yeah… (Ex 423)

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Nat: *…and when we got out there, they said that we could take the cat but we couldn't take the dogs…other people were taking their dogs but we couldn't take ours…because ours were big dogs… they were blue cattle dogs* (Ex 599) *…so I guess I wasn't angry, as such, but there wasn't a lot of communication in that first eight hours …and I didn't like being told "No" I couldn't do something… because I wasn't in control and I didn't like that…it's my house, it's my dogs… I wanted to be in control and I couldn't be in control because of the circumstances* (Ex 665)

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Nataly: *The next day we were emergency lifted out of* (place name) *but had to leave Dolly behind because they would not let her come with us* (Ex 902) *…we were able to have Dolly stay with us the whole night but the next morning when they evacuated us to* (place name)*, we had to leave Dolly behind. As there was no set up for pets it was very hit and miss…* (Ex 914)

Several participants raised the topic of inconsistencies in evacuation operations, with apparently some animals being accepted in evacuations and others not – even, as Kalia points out (above), between crew members in the one rescue vehicle. Nat's comment indicates the significance of an animal's size and species in being accepted for evacuation[78]. In Nataly's case, Dolly, the dog, had been included in the initial airlift rescue but not the second evacuation flight. Nataly had expressed her distress at being parted from Dolly – both had been traumatised[79] by their experience and Dolly was the only 'pet', from among several in the household, to survive (Nataly had also lost her home and everything in it).

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[78] This is a point which will be expanded on in AS (animal size) in sub-theme 3, Animals (A).
[79] The impacts on Dolly are to be covered in IOA (impacts on animals), which can be found in Appendix C.

A consistent approach across all rescues would have meant less confusion and resentment. One of the main problems with an extempore approach, or on-the-spot judgement calling, is that 'wrong' decisions can be made, resulting in contradictions and irregularities as well as increased tensions in already difficult circumstances. Additionally, as Heath and Linnabary (2015) point out preplanning and the establishment of uniform integrated human and animal emergency management strategies would be more likely to lead to more successful (for humans and animals) disaster responses. They note that in the US there is still much to be done to address this issue and '…the plight of animals in disasters is frequently viewed primarily as a response issue and frequently handled by groups that are not integrated with the affected community's emergency management' (2015:173).

With this in mind then, the 'problem' of 'pets'/animals in disasters would be reframed: not solely dealt with as a separate animal management issue *per se*, but becoming an integral part of a whole-of-community strategy. Heath and Linnabary (2015: 174) propose that,

> …applying the principles of emergency management to the care of animals in disasters leads to improvements of public and animal health that are sustainable and will likely reduce the incidence of animal issues arising in disasters

This would mean working toward a standardised code of practice model that can be adopted broadly regarding the 'whole of family' in disasters, aiming at inclusivity of *all* family members.

Evacuation centres (EVACC)

Kim: *…but all these poor dogs everywhere, on the stairwell … wherever they could find … we just had to leave them* (Ex 461)*… they were there on their own, it would be …yeah…be close to 24 hours* (Ex 462) *… yeah, there was nothing… like even trying to find things to put water in for them, you know…*(Ex 498)*… I just can't remember what we did now. There was me and a neighbour and we had them both together and we found newspaper… put that down…Oh!… that's right… somebody had some biscuits…you know…dried biscuits…crumbled that up… they probably ate that before we even turned around…and found something, a container or something that we put water in…there was so many animals there...* (Ex499)

This was not an officially designated evacuation centre – indeed, there was not one allocated in the town at the time.

Nat: *…so there were quite a number of animals there…yeah…quite a number of animals…* (Ex 612) *…the dogs were sleeping with the owners because there was nowhere else…they'd lost everything at that stage…they didn't know they'd lost everything but they had…so that's all they had… was their clothes on their back and their pets…* (Ex 614) and,

Nat: *I think they* (emergency management planners) *need to be aware of the human pet bond a bit more, and that if there is an evacuation centre… not necessarily a designated area …but somewhere where people know that if they go there and they've got their pet… that there will be a section where they can put their pet and know that it will get food and water and cared for the same as they will… because it's their friend…* (Ex 653)

Nat's comment here is rich with concepts: among others, her insights about emergency planning and the need to consider human-pet bonds; the requirements for animals' needs in evacuation centres; the depths of such bonds and the value of any succour for companion animals.

Brooke: *I don't recall hearing anything about where shelters might be... and I probably didn't take that in because … I knew so many people in the area that I could go to so I wouldn't have gone to a shelter….but also because of the dogs I would have thought we couldn't go to a shelter…* (Ex 315)

Brooke evacuated to her in-laws' home but relayed that she would not have even considered trying to seek out an evacuation centre: '…yeah, it was my impression that most of them don't allow them (pets). For us, it would be, you know, we can't go. We just can't go'. Because of the established culture of non-acceptance of animals in shelters being firmly established in her mind, she would not have even considered trying to access a public shelter.

Karen: *…I don't know if I'd have gone to an evacuation centre as such anyway. It was purely we were sort of in a mini evacuation centre… but we were with strangers… but there wasn't as many and having the girls and animals around so*

many other people made me very nervous and wary…I'd have rather stayed in my car than have been in such a large place (an evacuation centre) *with so many others…* (Ex 288)

Karen was apprehensive about having her daughters and her animals close by strangers in an unfamiliar location. She stated she would have felt more comfortable staying in her car with her daughters and animals than staying in a larger evacuation site with larger numbers of people. Karen made it clear that it was important that she kept her animals with her but that the process of coping with this while trying to find suitable refuge where they could all remain together was stressful. While it is probably difficult for many smaller communities to accommodate everyone's needs, considered advanced planning and preparation by community groups involved in emergency management measures would enable some viable alternatives to be pre-determined. Having a safe refuge is the most basic right (or should be) of the animals but being able to stay with their families would be of enormous emotional/psychological value to both the families and to the animals (Barrenechea, Barron et al. 2012; Austin 2013; Evans and Perez-y-Perez 2013; Heath and Linnabary 2015)

Kim: *Well, from here they* (the animals) *were definitely all left at the school … so sort of left there… but the school has said if it ever happens again they are not going to allow anyone in there… so I don't know what the hell is going to happen if they have a major disaster again…mainly because people sort of left it in a mess, you know … and of course, animals, of course… when I got there I helped clean up and everything but we put newspaper down where we could… but I mean … yeah… I suppose it was pretty bad for the school too* (Ex 466)… *yeah, and you couldn't leave them home … she would have drowned, you know…of course, we didn't know what was going to happen to the school… so everyone is thinking that their animals are going to get washed away…yeah… it's hard…I mean…some people had more than one animal… so terrible… and children… you know… what do you do?* (Ex 468)

Kim's situation also underscores the necessity for community preparedness. Because the evacuation process was spur of the moment the school class rooms were not intended as a refuge for animals. An unfortunate consequence was the 'mess' left

behind, leading to the school declaring it would no longer be available in any future events. Understandably, the 'mess' was a hygiene issue for the school, however, under the circumstances, there were few viable options.

Nat: *Yeah, yeah… because I wanted Tilly to go to the bathroom… because I thought it was the right thing to do for her because she had drunk all her water and everything like that… but it was hard because I knew she was about to have a cat fight… because there was four or five other cats in there…yeah…and I didn't want a sick cat because someone else's cat could have been totally feral for all I knew…if you know what I mean?* (Ex 668)

Nat's concerns included the possibility of her cat having contact with other cats in the shared space and that may not have been vaccinated. Such a potential for transfer of pathogens through faeces or direct contact (Levy, Edinboro et al. 2007) is also a consequence of animals' toileting needs that can be problematic under such close and inadequate conditions and a matter that requires consideration in planning strategies.

Evacuation temporary accommodation (EVACTA)

Staying in temporary accommodation with pets can come with sundry unanticipated complications. These can include the unpredictability of a (stressed) animal's behaviour, the hosts being unaccustomed to the needs of 'pets', in general, through to the consequences of changes in a 'pet's' diet or to families having to break apart because they would not all be able to fit in the one location for shelter.

Brooke: *We were really lucky in that my parents-in-law loved having our little dog, Seb… but they were not set up for a dog so when we went around there that night we were kind of hoping we would only be there for one or two nights …*(Ex 304)*… and then once it became obvious we were now homeless we had to build a little fence down the side of the house … make sure it was enclosed …*(Ex 305)*…but my father-in-law did work and stuff and there were appliances and tools and old bits of wood lying around with nails in them, so we had to really… puppy-proof … their house … *(Ex 306*)… and they've never…ever have they had a pet so that was a bit difficult as well… like…my father-in-law left the gate open a couple of times… and Seb got away... just those kind of little adjustments that my mother-in-law …ummm…* (Ex 307)

While having somewhere to go to in an emergency and being able to keep the family unit together is unquestionably valuable, having temporary accommodation with 'pets' in an environment not normally set up for them can be a problematic, even contentious[80], issue. Circumstances where special adaptions are necessary to cater for the needs of pets require the willingness of hosts to accommodate these changes.

Brooke was fortunate in that her husband's parents were accepting of her dog and were so disposed to as allow modifications to their home in order to provide him with a safe space. There were, however, still unforeseen issues that could have led to tensions within the family and for which conscious adjustments to daily routines needed to be made. For example, remembering to keep the gate closed and to not leave work tools, or other items potentially dangerous to an animal, lying around.

Kim: …*after that* (the flood) *I had to go to another town and stay with my sister for the four months and even now she* (her dog) *wouldn't leave my side* (Ex459) *…I mean* (name) *down the road here… she stayed with some friends that wasn't family…and she's got a dog and the friends had three dogs and it made it very difficult for her… and you're with somebody that's not family… I don't know… it's all right staying with them for a day or so… but when you've got to stay with them for several weeks until you find a place… yeah…* (Ex510)*… plus yourself… you don't want to intrude and when you've got pets too…it must make it so much harder* (for the hosts)….(Ex 511)

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Nat: *…and we went to a friend's house for three nights and then they let the cat out… of course… not knowing about cats…so I chased the cat down the road* (Ex 609) *…none of us expected to be there for that long…she does have a large old house so it wasn't a big problem. ..but, you know… Tilly is an indoor cat…and their business comes from their house, so constantly ... "the door's open, don't let her go out"* (Ex 632)*… she was like a ... I suppose I'd lost so much, I couldn't stand it if I'd lost her*

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[80] This was the case in Barb's situation, where her children's lives and her cats lives, were endangered because her ex-husband was so against offering his home as a refuge for the cats. Leaving their father's home, to find shelter where their cats would be welcome, meant that her children had to travel back through locations that were highly vulnerable to fire encroachment (see HF/P, page 203).

(the cat) *as well* (Ex 633) *...and, see, that whole period of time my husband… we weren't together….he was down here guarding the house and we were up there in* (place name)*… and we travelled four hours every day to take Q to school because of the road…the road was so bad…and for me to get to work and then back again at night…yeah..*(Ex 634)*… and because we were all split up, families were split up and people didn't know where their family members were, because some went to* (place name) *and some were evacuated to* (place name) *...so then those respective people didn't ... because communications were down… you didn't know where everybody was. Does that make any sense?* (Ex 635)

Nat felt that she had already 'lost so much' in the flood and that if anything were to happen to her cat (especially through negligence) it would be too great a loss for her. It becomes clear that the cat's importance (and understandably so, given the friends would not have the same connection with it) was not as great for the others as it was for Nat or they probably would have been more focussed on the cat's presence and its safety requirements. The sentiment in Nat's statement invokes the notion of *layers of loss* (see, for example, Malone, Pomeroy & Jones, 2011; Malone, 2016) and the compounding of grief/trauma. She had experienced a number of losses as a result of the floods, including: loss of possessions; loss of continuity in her relationships (personal and community, as these became fractured for a number of weeks); loss of personal space; loss of sense of place; the loss of her home as it was prior to the floods. All of these would have been distressing enough, but to add the loss of her cat, with whom she shares a close bond and considers to be family, would have made a difficult time even more traumatic.

Nat: *So because I was feeding her something else, well she wasn't sick but she was sick, if that makes any sense…and we were somewhere… and I had to get a litter tray... and I had to get litter and, being from a cattery, she is used to one particular type of litter stuff... and that didn't smell right so she didn't use it… she went on the mat…and that caused issues in the household…because the cat dirtied on the mat and that stank…and then because we had water restrictions and they said there was no water, they cut all the water because the flood had broken the pipes…so there was no town water, there was no water… you couldn't really…normally you just go and soak it in a bucket and clean it up but we couldn't do that because we had no water,*

except for rainwater. So we had to stick it in the bucket outside and hope to get some rainwater in it… (Ex 640) *… and I wasn't prepared for the cost of buying all those things that I knew I had at home, if you know what I mean? I didn't have extra money to spend to buy all that because it was unexpected…so it was financially a bit of a worry there for a little while* (Ex 641)

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Tessa: *…so we packed up and we went in all different directions because nobody had a place for a family of four adults and four pets* (Ex 688)*… I went to my parents' place with two cats …and the two cats I put into temporary...they were the guinea pig cages from work and I had a cat in each cage, with their own water, down at* (name)*… out in their garage.*(Ex 689)*… my husband went to* (name) *who had a unit, and he went with my … son and the two dogs, they went to her unit* (Ex 690)*… my* (other) *son went to* (name) *place. We were all split up that night and the poor old horse got left home to his own devices* (Ex 691)

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Gwen: *I was unnerved and found myself unable to take the decision to remain at home overnight. Several times I came back in the daytime but couldn't sleep properly and neither could the dogs. So we went back to* (name) *four times over the following weeks* (Ex 950)

Nat, Tessa and Gwen's comments shed some insight into the displacement that families experience as well as the types of little complications that can become magnified in these conditions.

5.2 Sub-Theme 1 – Post Disaster Thoughts (PDT)

Presented in this sub-section of Theme 1 are the views of a number of participants on aspects of issues relating to the availability of temporary housing for their animals (as opposed to temporary accommodation for people with animals [EVACTA]) during, and in the post stages of, disasters. Some of their experiences would seem to suggest there may be the potential for availing certain additional resources at these

times that would give 'owners' extra peace of mind and help ensure safety for their animals.

This section, while still intimately connected to the more experiential aspects of disaster events (in keeping with Aim1) that impact humans, concerns an aspect more directly related to the practical issue of animal specific disaster accommodations. For this reason it was deemed worthy of its own category.

Safe temporary housing for animals (STHA)

Several of the participants raised the importance of having somewhere safe where they can leave their animals following a disaster. The following excerpts provide some insight into how having safe temporary housing for their animals can provide relief for 'owners', the complications that can arise without having it, and the distress that can result if it is not co-ordinated or managed effectively.

Karen: *The place where we stayed were strangers and I just asked if we could sleep in the car… my girls and I could sleep in the car… and they said "Look, it's okay" and they gave us one of their kids' rooms and…they let us take the dogs in there* (Ex 226) … *the cat stayed….we were so lucky they put her in a little cage, at least she wasn't in her cat box…she had access to her kitty litter, food and water…we couldn't take her out and let her run around or anything because she would have just gone* (Ex 228)

Karen and her daughter had been invited in to stay with people who were unknown to them and where they were allowed to have their cat and two dogs inside the home. Having a viable option for the safe housing of their cat allowed Karen and her daughter to focus their attention on their horses (in a nearby paddock) and dogs. Being able to easily cage and 'store' the cat through the day freed them of the need to constantly supervise it. Had they not been able to do this, the cat's safety would have become a burdensome issue while they were trying to meets the needs of their other animals (and, indeed, the numerous other horses they considerately tended while their PICs, who had been evacuated, were unable to do so). Karen's experience (and Kim's below) also draws attention to the notion that it not always possible to access officially designated emergency shelters and private options need to be sought out.

Kim:*....because all the fences are gone and everything, so we had to sort of...you know...tie her up inside so we could get a room cleaned...yeah, it was a hassle, but... you know... she was just that way you couldn't leave her anywhere* (Ex 469)*…see the university is here, the Queensland University… they were really good with rescuing and holding dogs until they could find owners and that, but if anything happens like in the case of floods… you can't get there...you just can't get there anyway… by road… to take the animal. That would be great if there was somewhere* (to safely leave animals) ... (Ex 475*)... yeah ...and I mean also people that, like, didn't have family close by, they had to eventually find places to rent while their home was being renovated or getting back to normal and they have got pets, so that made it really hard for them* (Ex 509)

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Nat: *...and of course we couldn't have the dogs for a long time because we had no fences, so we actually agisted them at a friend's house...we had them here for maybe three weeks, four weeks… and then it was getting too hard because they were following him* (her husband) *and the army fellas were cracking up… because they'd come down the street and our dogs would race out because they were protecting the property… and they probably would have licked them to death but they make a lot of noise...and so we had them taken away to a friend's place and they were probably gone for the remainder of that time... it was a long time anyway...* (Ex 620) *...and I know the council were collecting dogs and cats and taking them to the pound to look after them, for people who couldn't look after them…but we'd already put our dogs on agistment so we didn't have to worry about that, as such...if that makes any sense?* (Ex 648)*...but it was more the fact that you were there and you were busy and not dwelling or worrying about it because you knew the dogs were safe, you knew the cat was safe...*(Ex 652)

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Casey: *...then all this mucky, disgusting water comes through from everywhere, because it has come up through the sewer drains and all sorts of things....that is not*

what I was expecting. As a kid I grew up in the hinterland, and we'd have floods… my experience of flood from the hinterland is that it is clean water…iIt comes through… it's clean water… you just hose it… rinse it off… wipe it down and then you just carry on… because it has got wet… but it got wet and it's fine….but the stuff that came through that drain and that water… it's just the stuff that got wet rusted within a week or two (Ex 357)

While Karen was fortunate to have happened upon people who were willing and able to offer safe temporary housing for her animals in the short term immediately following the flood, Nat and Kim raise the issue of the short to longer term need of it. In the time following a disaster, for many, the focus is on restoring homes and yards to a habitable state, including mending fencing and, in the case of flooding, removing harmful and/or toxic waste that may have washed in (as Casey notes, above, flood waters can carry harmful farming chemicals, sewerage and other detrimental organic matter as well as larger detritus, including sharp metals and glass, that can be unsafe for both humans and animals). Having somewhere to at least leave pets through the day while the clean-up phase is being carried out would help ensure their safety and allow their 'owners' to concentrate on the clean-up while having peace of mind.

Brooke's experience draws attention to an alternative opportunity for having somewhere safe to leave her dog (in this case a doggy day care facility) through the days following the flooding event that forced her from her urban home:

Brooke: *…we were so very lucky in that Seb has been going there* (to doggy day care)*, and because …when we went back to work it was a bit tricky with our parents-in-law to leave Seb there… so…someone very, very kindly … or possibly it was free …I'm not sure… paid for Seb to have the week at the doggie day care centre… so that was amazingly kind ...* (Ex 309) *…you know when we actually had to do the big clean up and established that we couldn't clean everything up* (by themselves)*, we had to keep the dog out of the way and make sure he was okay and not in the way of people who were helping us and things like that* (Ex 325)*… the doggy day care I definitely think was fantastic …   it was something familiar to him, when everything else was crazy… but when we both had to go to work and my in-laws weren't home he had to be locked either inside or outside …   he was used to*

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having ... we couldn't lock him outside because of the fencing in particular ... that meant he had to be inside and then that, ... the toileting ... and everything...having the doggy day care centre, none of that was ...was an issue ... if that sort of thing could be made available, that was excellent (Ex 327)

It would seem that a post-disaster day-care service (as opposed to animals going into boarding kennels and staying overnight for days to weeks) might be a useful and viable option. A program might be envisioned which could help alleviate pressures/burdens on disaster survivors by providing them with an alternate choice at a difficult time and yet allowing them to have their animals with them at night for continuity in the relationship and the comfort that this can bring. Nat's comment on unexpected expenses (above, in Evacuation Temporary Accommodation/EVACTA) and Nataly's (below, this section) draw attention to the extra financial hardships that can be faced in times of crises. Not only is there the expense of house and yard repairs and cleaning, replacement of lost goods or temporary accommodation, there is also the likely extra expenses required to cater for the needs of animals, such as temporary housing/kennelling. As Nataly (having lost everything) says, '…as pensioners it was an extra struggle for us to get through (paying for kennelling) (Ex 917).

A scan of current state and federal government websites indicates there is the potential for obtaining government funding for the provision of safe keeping of animals or welfare services for them in times of disaster. There are, however, strict limitations on who can apply for this. For example, the New South Wales Government's web page *Disaster Assistance Guidelines* (on-line[81], available 31/3/2017) states the following exclusion:

> Reimbursement is not provided for privately arranged care of pets and companion animals.

> Long term accommodation and care beyond the time of operation of the emergency evacuation centre or temporary accommodation is not provided.

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[81] NSW GOVERNMENT, 2015, *Ministry for Police & Emergency Services,* Disaster Assistance Guidelines, A.3 Care and Safe Keeping of Pets and Companion Animals(available on line 31/3/2017)

Similarly, the Victorian government (on-line[82], available 31/3/2017) makes clear that,

> Grant funding can be awarded to not-for-profit non-government organisations that operate to provide:
>
> - for the welfare of animals; or
> - an 'animal shelter' service; or
> - education programs on responsible ownership of animals; or
> - services as a community foster care network for companion animals; or
> - animal relief services and use of facilities to the community during emergencies.
>
> Applicants must also:
>
> - be an incorporated body, co-operative or association; and
> - have an Australian Business Number (ABN).

It appears that, currently, it is unlikely that individuals or small business owners such as doggy day care operations would qualify for funding. A quick search on Google indicates there are numerous of them in operation in each state. Would there perhaps be the potential to harness this resource in some way at times of disaster and post-disaster, during clean-up phases? Perhaps an assistance program whereby such businesses can be registered through a process requiring a pre-approval system with necessary checks and screenings and where private individuals might be able to claim a rebate upon production of receipts? A system whereby people could claim a 'doggy day care benefit' for a certain period of time (or other qualifying parameters) after a disaster during the clean-up phase and when they are not able have their animals at home through the day because of safety reasons? Certainly, the availability of a service/scheme such as this could benefit individuals and their animals, small business owners and the community, at large. It would be particularly beneficial for companion animal PICs: they would have somewhere safe for their animals through the day, the continuity of contact with their animal each night and the financial assistance so important at times like this.

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[82] Victorian State Government, 2017, *Animal Welfare Fund – Grants Program*, Frequently Asked Questions (available 31/3/2017)

Nataly's experience offers insight into the depth and importance of the human-pet bond and the emotional strain that can be suffered when this relationship is jeopardised (Clements, Benasutti et al. 2003; Morley and Fook 2005; Chur-Hansen 2010)

Nataly: *...finally she* (dog, Dolly) *was found but because we had lost all of our possessions plus our home we were staying with family and we had to put Dolly into a pet boarding kennel at* (place name) *... there were so many conflicting reports as to where she actually was!* (Ex 905)*… as we had lost our home we had to stay with family while we were healing and sorting out what we were going to do. This was particularly distressing because we knew no one in the area and we couldn't do anything about it. So we had to trust her with strangers* (Ex 915*)... they were amazing! They gave us updates and reported on her regularly… but as pensioners it was an extra struggle for us to get through.* (Ex 917)

As mentioned previously, Nataly and her husband, and Dolly, had been airlifted to an initial temporary location. The personnel there assured them that Dolly would be cared for until they were able to get back, a week later, to collect her but despite this promise she became 'misplaced'. She was eventually located but then had to be placed in a boarding kennel for the next three weeks as Nataly and her husband were unable to have her with them. While it was a 'particularly distressing' situation for Nataly to be separated from Dolly and to have no control over their situation, she was grateful for the feedback about her dog from the kennels. This would have provided some sense of continuity of relationship at a time of great uncertainty and change.

In communications with Nataly over several occasions it was clear how strongly attached she was to her dog. They shared a particularly harrowing experience and despite the great threat to her own life, Nataly described being constantly aware of what her dog was enduring at the same time. They were both afloat (as was Phillip, her husband) inside the house with furniture swirling around in the water. At one stage, Nataly was unable to reach Dolly, who disappeared from view, and she feared the worst,

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> *We were stuck where we were and couldn't reach her… finally we could not hear her anymore and I was sure we had lost her! It was a terrible time* (Ex 896)

When Phillip found Dolly, atop a floating table, Nataly was greatly relieved,

> *Imagine my joy when Phillip came back and there was Dolly firmly attached to his shoulder!!!!!* (sic) (Ex 898)

Indeed, it was more than simply relief to have found Dolly alive – it was 'joy'; despite the dire circumstances Nataly found herself in, finding she still had her dog elicited feelings of joy. In a roller coaster of emotions, and all occurring within a few moments, she went from thinking Dolly was dead to learning she was still alive. As her life was falling into a state of chaos around her, Nataly's relationship with her dog would have become even more significant and the bond even more meaningful. Being so strongly bonded with their dog and being unable to help her greatly added to the emotional toll – on them, and on Dolly, as would later become apparent[83]. The trauma of the experience and associated levels of anxiety would have been compounded by the ensuing 'misplacement' of Dolly at the initial evacuation site. Evans and Perez-y-Perez (2013) note the significance of being able to maintain the bond between 'owner' and 'pet' in times of crisis and the benefit to the emotional state of both 'owner' and 'pet' as well as the increased personal, and ultimately, community, resilience.

Kalia: *…like if your pets - I mean, obviously you're not going to take dogs or cats that are scratching and are biting and are a danger to other people… but if your dog is calm, cool and collected, I can't see why they can't just have some sort of a bag that they just zip your pet into and it's lifted up in a chopper or boat…I'm sure people would leave earlier in that situation* (Ex 390)

Kalia expresses her belief that if there were some working system whereby pet animals could be safely contained and lifted those who stay behind because of their animals would be more likely to leave earlier. Buried within her statement, however, is a reflection of an ingrained, taken-for-granted assumption: the dominant paradigm, in Western culture at least (see, for example, White, 1967; Preece, 2000; Plumwood, 2003; Preece, 2011), informs society at large that humans are of primary consideration, particularly in disaster situations, and animals are secondary, at best.

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[83] Details will be found in Appendix C

In context of Kalia's statement then, it is only if the animals presenting for evacuation are conforming to human 'standards' of behaviour that they will be considered acceptable for evacuating.

Brooke's earlier comment (pge. 122) regarding the lack of warning in an urban flooding event inspires thoughts on ways in which community awareness of potential 'site-specific' disaster hazards and preparedness options might be extended. At the time, Brooke and her husband were living in a rental property. It would seem that there might be an opportunity to engage, in particular, real estate agents, who might liaise with local councils and be prepared to pass on relevant information with their information packages at the time that contracts are signed by lessees. Renters new to an area may not be fully aware of the particular geographic features and potential hazards for that area and, as the old saying goes, 'being forewarned is being forearmed'. For example, in flood prone areas, clients who are warned that they will be living in one of the more low lying streets can be more vigilant during periods of heavy rainfall and take earlier necessary precautions/preparations. Additional information in the packs might include some notes on local geographic and geologic features, potential hazards, preparation and safety suggestions and contact phone numbers for further information. A multi-stakeholder approach to informing people will serve to increase levels of awareness and preparation opportunities and increase likelihood of more successful evacuations should the situation present.

5.3 A word on speciesism and ecological inclusion

Section 2.3 provided a discussion on the historical influences that have led to a sense of human separation from, and dominance over, the nonhuman animal world. Extending awareness of the culturally embedded $\frac{Human}{Nature}$ binary has the potential to encourage thinking (holistically) beyond its constraining force. Doing so allows for the imagining of more inclusive ways of living with nonhuman nature/nonhuman animals, generally, and particularly, in times of upheaval and disaster. Certainly, from an ethical perspective, to omit the inclusion of animals in disaster planning and reserve it solely for the benefit of humans (given that we take so many animals in so many ways into our lives at all times) is what is generally thought of as *speciesism*

(Singer 1977; Ryder 1979). However, Calarco (2012:46) would argue that *anthropocentrism* is the more apt descriptor:

> …the real problem…is not speciesism but *anthropocentrism*, understood as the privileging of that class of beings who best fulfil a conception of what is considered to be quintessentially human over and against all nonhuman others.

Speciesism generally implies the favouring of humans, by humans, over other animals species. However, it can also refer to the preferential treatment of particular nonhuman species by humans as, for example, companion animals – those species favoured and taken in to live their lives in close association with humans, and being more and more likely to be considered as family members. Anthropocentrism, on the other hand, specifically refers to the privileging of humans, by humans, over all other species, in all regards.

Pointing to the imperative for overcoming exclusionary behaviour that has led to the exploitation of nature, particularly nonhuman animals, Bennison (2010 on line) argues for the concept of *ecological inclusion*. He points to the need for inclusionary thinking and acting that will lead to a new' interrelationship', with nature and nonhuman animals, that has become critical to overcoming ecological problems, more generally. He argues that such thinking (respectful, and holistic, to *all* of life) should become 'engrained into the human psyche' such that it evinces unquestioning inclusivity.

And before such thinking as the above discussed inclusivity should be dismissed out of hand as unworkable/impractical, a brief reminder of Nash's (1989:4-12) ideas on the evolution of ethics and the expanding concepts of rights is timely. He demonstrates graphically (as represented below in Figures 8 and 9), and, as he himself admits (pge. 4) 'at the inevitable risk of oversimplification', the manner in which ethical/moral considerability and the granting/conceding of rights have progressed over time to become gradually more inclusive, yet also allowing for the possibility of further growth[84].

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[84] The South Australian Government's regulations governing the protection of significant trees could be seen as an example of a step along the pathway in context of Nash's concept of the evolution of ethics (see, for example, https://www.sa.gov.au/__data/assets/pdf_file/0003/17571/Protecting_Reg_and_Sig_Trees_Comm_Info.pdf , available 10/12/2017).

(Figure 8 has been removed due to copyright restrictions)

Figure 8 The Evolution of Ethics (Source: Adapted from Nash, 1989:5)

Similarly, arguing from the perspective of the psychosocial development of moral behaviour , Bandura (1991:45) notes that the evolution of 'standards of conduct and the locus of moral agency' is universal and this arises 'from basic uniformities in the types of biopsychosocial changes that occur with the increasing age in all cultures'. He further argues that such changes are not automatic and that they must be activated by self-regulatory processes which influences collectives and which, in turn, act in the reverse/circularity. His rationale of the progression of change in 'moral thought and action' is in line with Nash's (1989) notions of the expanding concept of rights and the evolution of ethics. A logical extension of the conjoining of their conceptual frameworks would lead to, ultimately, an automatic and unquestioning inclusivity in disaster management process, policies and strategies that reaches far beyond human life only.

(Figure 9 has been removed due to copyright restrictions)

Figure 9 The Expanding Concept of Rights [from a US perspective] (Source: Adapted from Nash, 1989:7)

Summary

This section has focussed on some of the practical issues faced by the study participants during disaster events. At a functional level, their recollections have the potential to provide valuable lessons. Exploring at a more abstract level exposes the unchallenged human-centricity embedded in current disaster planning and response measures – and, indeed, in the acceptance of the status quo by many of the participants themselves (for example, in the tacit acceptance of the idea that current models for rescue operations [Tess] or evacuation shelters [Brooke] are specifically for humans. Examining the data from the functional as well as the abstract level demonstrates evidence of the fulfilment of Aim 1 of this project (and is in keeping with the thesis on which the study is based, and which is stated in Chapter 1, page 6), whereby experiential issues have been explored and identified.

As previously noted, within each of the seemingly separate experiential issues commented on in this section is buried the dominant paradigm of a human (hierarchical) separation from other animals. This is manifest in the human-centric

position taken in current disaster policy and management approaches. Such a prevailing attitude influences, and reflects, how nonhuman animals are generally valued[85] – ranging from unimportant to important simply in the context of their utility to the humans with whom they are associated – and catered for in disaster policy, planning, rescues, through to accommodation services. Yet, such an attitude impacts on the disaster experiences of the Person/s In Care (PICs) and can place extra pressure them. The PICs, especially those with particularly strong bonds or attachments (Archer 1997; Boyraz and Bricker 2011; Charles 2014), are made more vulnerable through the omission of inclusion of their animals (frequently thought of as nonhuman family members) in disaster measures (Barrenechea, Barron et al. 2012; Evans and Perez-y-Perez 2013). And as for the nonhumans themselves – their vulnerability only stands to be heightened under such a paradigm.

The following section (Chapter 2/Connections) is more conceptually focussed and offers a discussion of the deeper, more intrinsic connections that humans feel for nonhuman animals. These are discussed in broad context as well as in specific relation to the study's participants.

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[85] More will be written on the valuing of nonhuman life in Chapter7/Disconnections.

6. THEME 2 – CONNECTIONS (THE TIES THAT BIND)

All are but parts of one stupendous whole…
Look around our world; behold the chain of love Combining all below and all above…
See dying vegetables life sustain, See life dissolving vegetate again: … (*An Essay on Man* by Alexander Pope, 1734[86])

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The fountains mingle with the river

   And the rivers with the ocean,

The winds of heaven mix for ever

   With a sweet emotion;

Nothing in the world is single;

   All things by a law divine

In one another's being mingle; -

   Why not I with thine? (*Love's Philosophy* by Percy Bysshe Shelley, 1819[87])

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…the fundamental similarities between all living things outweigh the differences. If an alien biochemist had only two cells from Earth, one from a blade of grass and one from a human being, it would be immediately obvious that the cells come from the same planet, and are intimately related. (Cox and Cohen, 2013[88])

…what is true for the blade of grass is also true for you… [t]his is because you share a common ancestor. You are related. You were once the same. (Cox and Cohen, 2013[89])

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Guided by the principles of a critical hermeneutic inquiry (as outlined in the methodology chapter), which seeks to explore more deeply people's everyday experiences and their understandings of them, the following discussion is concerned

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[86]Available on line http://pinkmonkey.com/dl/library1/essay01.pdf 18/7/2107
[87] Available on line https://www.ucm.es/data/cont/docs/119-2014-05-31-ShelleyLove%20Philosophy.pdf 26/6/2017
[88] Brian Cox and Andrew Cohen, 2013 *'Wonders of Life'*, Harper Collins, e-book Location 188
[89] As above, Location 178

with demonstrating ways that the participants reveal their more profound, deep-seated connections with nonhuman life.

A closer look at the transcript extracts highlights deeper *connections* humans can have with nonhuman animals, both in the particular and in general. Such connections are not always straight forward. The participants' comments offer insights into the complex, and largely deeply dichotomous, relationships that humans have, generally, with the rest of nature – at certain levels feeling profoundly connected with it and yet, at others, perceiving an isolation and deep schism between the human world and the nonhuman one –insights into *disconnections* will be explored in more detail in the next section (Theme 3/Disconnections). Theme 2 is concerned with establishing evidence of the ways that the participants of this study exposed their particular deeper held connections with their animals, or those that they interacted with during disaster events and, in some instances, their more general senses of connectedness with nonhuman nature. Providing examples, and analyses of them, honours Aim 2 of this thesis which sought to expose evidence of human-nonhuman animal connections.

The introductory section of this thesis outlined several possible theoretical explanations for the ways that humans connect with nonhumans, including concepts of attachment/bonding (see, for example, Woodward, 2007; Beck, 2008; Bowlby, May *et al*, 1989; biophilia (Wilson, 1984, Kellert & Wilson 1993), biosynergy (Rose, 2011), and other co-evolutionary arguments (see, for example, Olmert, 2009; Shipman, 2011). The following excerpts may suggest, perhaps, that there is a multiplicity of causalities and/or motivations at play. Theories of attachments or bonding may be an appropriate explanation for personal connections (human-human, human-nonhuman or nonhuman-nonhuman) but what of the reasons for emotional responses to, and actions on behalf of, animals with whom there is no personal connection (emotional or physical)? Would attachment theory explain this fully or is there something else driving this?

While it is beyond the scope of this study to argue for one approach above another, it is hoped that the following will contribute to current discussions about how humans more deeply connect to nonhumans.

As with the previous chapter (Theme 1/Experiential), the excerpts are arranged by distinct codes, even though there is the potential for overlap between them as all are facets of human-nonhuman connections. This is done to highlight any critical nuances between them and emphasise any particularities. It also aids in underscoring the consequences of such connections in the circumstances of disasters.

6.1 Codes and Extracts

Animals as Family (AAF)

One of the most recurring declarations by participants was the claim that their animals (companion, in particular) are a part of their family. Such statements were, in all cases, delivered in such a matter-of-fact manner as to suggest that this was a natural thing and a point not open to debate. By logical extension, the avowing of such a closeness of relationship has implications for the expectations of companion animal PICs for their animals' welfare when disaster strikes – if *the family* is to be rescued/accommodated, in whatever way, then it should be *all* of the family.

Barb: *so the family members involved in it were …two teenage children and two cats* (Ex 43)*… I don't know that the kids would have left them even if I'd said 'get the hell out of there!'…but that was the decision…'we're evacuating …we're evacuating everybody'…*(Ex 45)*… I just think…my reaction at that time…'You can't…you can't'…I mean I wouldn't do it now…I mean you just can't walk away and leave part of your family…*(Ex 55)

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Tess: *As soon as they* (her horses) *spotted us, over they came … the two of them came trotting over and I think it was like "Come and take us home we hate it here with all these horses bullying us"* (Ex 120) *… my two beautiful babies* (Ex 132)

Tess's horses are not merely a means of transport or for being involved in equestrian events or part of a collective of household non-humans, but are more intimately linked to her and her family. She also suggests (through an anthropocentric 'voice') that her horses ask to be taken 'home' – the 'home' that they all share.

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Tess claims her horses as family members when she refers to them to as her 'two beautiful babies'. The statement speaks, on several levels, of the depth of feeling Tess has for her horses: she comfortably declares her feelings for them, she considers them to be 'beautiful' (with all the richness of connotation that this descriptor can imply) beings, and, most tellingly, she assigns them the appellative 'babies'. 'Babies' suggests, at once, something vulnerable and dependant, and, when linked with the possessive determiner, 'my', she establishes a relationship of very close kinship/belonging. The expression, in and of itself, is not evidence of her perceiving her horses as 'babies' *per se*, but it speaks to the way language is used (in this instance, to denote love and tenderness), and the connotations that are implicit. Jepson (2008) and Stibbe (2001, 2005, 2012), for example, write of the common practice of using language (across cultures), in the pejorative, to reinforce/further entrench notions of 'Other-ness' and bolster feelings of justification for subjugating animals. Examples of this can be found in everyday expressions, either minimising the animal directly by assigning negatively connoted descriptors/adjectives such as 'sly fox', 'dirty pig', 'mad cow', or by using the same or similar expressions to insult or belittle fellow humans by comparing them to the said animal[s] and, thus, *lowering* their status to sub-par humans.

The trend to claiming non-human animals as 'family' and 'my babies' might represent a slow shift in paradigm, beginning with the animals that sit at the so-called boundary between the human and the nonhuman. Claiming companion animals as kin moves them from (in terms of the dominant paradigm) the human/animal binary and places (*elevates* them? – given the traditional hierarchy of the $\frac{Human}{Nature}$ dualism) into a borderland between the two poles of the binary opposition. As such, the strict boundary between the two becomes a little less clear. Russell (2010:3) refers to such an erosion in terms of the 'permeability of the human-animal boundary'. Describing the persistence of the dominant paradigm of human separation and superiority[90]

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[90] Indeed, an example of an everyday application of this is to be found in a recent on line article by Jane Caro for the *The Age*, 4/7/2017, 'Disgust at female bodies is alive and well: just ask Trump, Putin and Larissa Waters'. While not naming the dominant Western paradigm as such (although the concept is there within her words) , she draws a link between misogyny and biology and states,

> Far from being made in the image of the divine, we're just another animal, subject to our biology. Worse, it is also a reminder that if we reproduce just like all the other mammals, then we will likely die like them too.

Russell (pg.6) notes, '[w]e are still the standard, and the effect is to move rather than remove the human-animal boundary'. Didur (2003, cited in Fox, 2006:526) writes '[t]he binary oppositions of the past tremble but continue to inform everyday decisions, assumptions and activities'.

Recognising the cultural constructed-ness of the human- nonhuman separation allows an opening up of ways of thinking (holistically) about nonhuman nature and the richness of the potential that this would bring. This is certainly not a new way of thinking but has yet to achieve predominance. Deep ecologists, Devall and Sessions (VanDeVeer & Pierce, 1998:222) write of the need for full self-realisation '…beyond the modern Western *self* which is defined as an isolated ego striving primarily for hedonistic gratification …', and for the 'realization of self-in-Self where "Self" stands for organic wholeness'. In other words, humans must mature beyond the narrow sense of 'self' identity to understand themselves as an integral part of the larger Self, which encompasses all other parts of the, nonhuman, world, to the point that *biocentric equality* is achieved. In this way, every part of the biosphere exists in a state of equality and (culturally imposed) boundaries become non-existent.

However, ecofeminist writer, Plumwood (1991) argues that deep ecology insufficiently challenges the human-nature dualism in any satisfying way and that it should be possible to recognise/value 'distinctions' and 'independences' between self and other;

> '…we need to recognize not only our continuity with the natural world but also its distinctness and independence from us and the distinctness of the needs of things in nature from ours.' (pg15).

As such, humans can acknowledge similarities and respect differences (as is desirable in any family – narrow or extended) in a broader ethos of kinship in which each nonhuman member is valued for its own 'intrinsic worth, autonomy and difference rather than on the basis of their similarity to humans' (Fox, 2006:527).

(Cont) It is my belief that it is this dislike of being confronted with our lack of divinity and specialness that is at the heart of most misogyny. Women's bodies make it harder for us to maintain our illusion of human exceptionalism. We urinate, defecate and have sex in private for the same reasons. They embarrass us because they are base and animalistic.

Still, despite the resistance/inertia to broadly reconceptualise ourselves as less special, or as ordinary, members of the 'Earth family' there has been a growing trend to see (certain[91]) nonhuman animals as human family members in recent decades (Greenebaum 2004; Holbrook and Woodside 2008; Walsh 2009). Indeed, Greenebaum, speaking specifically about dogs, argues that not only have companion animals been awarded status as family members, they are, in the process, shaping (or reshaping) identities of the human family 'parents'/'guardians' – '[n]ot only are the dogs elevated to the status of children, but the dogs also elevate the status of dog owners to parents' (2004:119). However, in many other sectors of society/community – aside from, perhaps, the 'pet' industry, which quite possibly has been as much a key driving force in the change of the status of companion animals as it has a response to it (McGreevy & Bennett, 2010; De Mello, 2012:150-151; Vänskä, 2016) – this shift has not kept pace in the same way. Legally, companion animals (indeed, all domesticated animals, at least) are still viewed as possessions or personal property (Paek 2002; Draeger 2007; Sankoff and White 2009; White 2009). A scan of emergency management documents across the various states of Australia[92] demonstrates that, when discussing the issue of companion animals/'pets' in emergencies, the language is couched in terms of '*animal* management' and not, say, in terms of 'non-human family member' management. Certainly, Taylor, Eustace & McCarthy (2015:7) note, 'there is a tendency for animal emergency management to be regarded as an 'animal' issue' when they, themselves, declare it as a 'people' issue, from a utilitarian/functional management perspective.

Karen: *...and I said to her* (her daughter) *"You just take your two boys* (horses)*"* (Ex 212) *...and I had my float there, and I got a mare and foal in it and then tried to get one of my other boys* (horses) *in...* (Ex 215) *…the dogs, well, they are our little boys. The cat sleeps in her* (daughter) *bed, the dogs sleep at her foot. My little boys* (dogs) *slept with me… they were a priority as much as what my girls were on that day…* (Ex 281)

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[91] As described in the Glossary, page ix, such preferencing by one species (humans) for certain other species is overtly *speciesist*.
[92] See, for example, NSW Government, 2015 *NSW Disaster Assistance Guidelines* (online, available 18/4/2017) or Victorian Government, 2016 *Victorian Emergency Animal Welfare* (online, available 18/4/2017)

When Karen advised her daughter to take her 'boys' (her daughter's two horses), a term more typically reserved for young male humans, she was ascribing the status of personhood to the horses: they were not horses *per se*, they were young male members of the family. By using the term 'boys' in such a familiar way it is clear that it was commonly felt between Karen and her daughter that this was a natural, un-contestable way to think of them. The cat and the dogs (her 'little boys') were of equal importance to Karen when she was making decisions for her family on the day of the disaster. Charles (2014:716) cites an Australian survey that found that '88 per cent of pet keepers thought of their pets as part of their family'. It is common for companion animals to share most, if not all, spaces in the home, share food, share furniture, have their birthdays celebrated[93], and to be included in family social occasions, forming part of what Charles (2014:718) refers to as 'hybrid families', 'post-humanist households' or multi-species households (pg. 715), where 'the humans are de-centred and the species barrier has no meaning' (pg. 718).

Brooke: *Seb is a member of our family and not taking him would absolutely not have been an option…* (Ex 318)*… We've always had…dogs… and they're like a member of the family and…you know… … he's our first baby* (Ex 330)

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Casey: *'People are already in a state of distress…they are in a state of upheaval… they are in a state of distress. Everything that they own is in jeopardy … people are getting victimised because they have animals with them. Those animals are part of their family. As far as I'm concerned my dogs are my children* (Ex 344)

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Kalia: *…and we had my sister's dog with us, who's like a Labrador-cross, he's nine years old…and my sister doesn't have children… so the dog was kind of her fur baby* (Ex 360)

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[93] There are now even specialist bakeries catering for dog treats. See, for example, http://www.thewoofery.com.au/ (available on line 7/7/2017), where it is even possible to buy decorated cakes and biscuits with 'Get Well' messages on them as well as those with birthday wishes!

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Nat: *They are our guard dogs, they are part of the family* (Ex 603)*… a lot of people had their animals and they are family…* (Ex 607)*… because a lot of people… it doesn't matter …elderly people, single people … a lot of people have a cat or a dog and it's their family…so it's like their children and it is a devastating thing* (Ex 637)*… because the one lady that I know that lost her dog… she has since passed …because she died of cancer… but she was just devastated…like… it was horrible… because she had lost her house… and lost everything…and then she had lost the dog…and she was just a mess…I mean…she got through it but it was terrible… because that was her baby…that was who greeted her at the door… and you think "Well I've got that… that will get me through"…it's the unconditional love that they give you…* (Ex 638)*… we wouldn't ring up to see how dad was… we'd ring up to see how the dogs were …we did want to talk to dad too … because they were a very important part of our family…you couldn't imagine life without them, really…* (name) *was on the roof beside me…she was on the roof and the dog was in the basket with her…so… you know…* (Ex 660)

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Tyler: *I've got my kids* (points to photo of cats)*…you know…they're like our kids…and when our…we got those in February because our cat died…after 18 years…like, I knew that cat more than… more than many …than any of my colleagues at* (place of employment)*…*(Ex 870)

Divided Loyalties/Disaster Dilemmas (DL/DD)

Having a strong bond with a non-human animal, particularly in times of disaster events, can mean difficult decisions may need to be made whereby loyalties will be tested and ethical/moral dilemmas will be faced that will confront and challenge strongly held values. Having to choose to save a child over a much loved animal, or having to choose to save one animal's life above another animal's, would be situations not usually faced in normal daily circumstances. Given the, now common, inclusion of companion animals as family members or kin (Charles 2008; Walsh

2009b; Charles 2014), the sense of disloyalty felt at having to forgo their inclusion in evacuations stands to be amplified and so, too, for the distress felt.

Barb recognised the dilemma and the emotional upheaval she would experience if she were forced to choose between her children and her cats, '…you know, I'm not leaving my children behind…but I'd be devastated if I'd had to have left those cats behind' (Ex 55).

She expresses her deeper held fear of the potential dilemma of having to choose between getting her children to safety or her cats. As a mother, Barb is not prepared to leave her children behind but acknowledges she would be 'devastated' if she were forced to leave her cats behind. This expression speaks to how deeply emotionally connected she feels to them.

Tess: *I went into the hairdressers this morning… I hadn't been to this lady before… and she was in a street over* (place name) *and she said she had got away with her two dogs …but they went out by boat …but she had to leave the two cats there because they couldn't fit everything in the boat… because they were taking people out…if you are taking the two dogs out… and she said how awful it was. She had to leave them there and she said she felt so terrible. But you do, you are responsible for them. We are the ones who put them there… do you know what I mean… in that situation'* (Ex 157)

Tess conveys the other woman's distress over having to make the choice to leave her cats behind due to a lack of space in the rescue boat. But Tess's comments also reveal something else – her insight into the vulnerability of the nonhumans[94] that we humans take into our lives and who are dependent on us for their protection. This insight, in turn, reflects the power imbalance present in our relationships, more generally, with nonhuman animals (De Mello 2012; McCance 2013; Taylor 2013). The embedded, invisible and consistent use of the human/animal binary reinforces the perceived hierarchical relationship, (or, indeed, nature generally when the binary human/nature is used). Krell (2013:Loc 208), discussing Derrida's thoughts on

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[94] The concept of the vulnerability of animals (VOA) in disaster will be taken up in the next chapter, Disconnections, Theme 3.

'questions of animals life and political sovereignty', expands on this notion of division further,

> Derrida is able to show that the twofold exclusion from the human public realm of beast and king, with kings and gods hovering above the law while animals grovel below, is in fact revelatory of Western humanity's self-conception.

Consequently, functionally and habitually, it is perceived as only 'natural', common-sense and inarguable that humans receive priority in all aspects of disaster management, rescues and accommodations.

Offering the hypothetical illustrative example of the dog-in-the-lifeboat scenario, Francione (2008:210) discusses this concept of prioritisation in terms of the ethics of *comparable harm* and the entrenched and largely unquestioned assumption/acceptance of the supposed greater value of human life above nonhuman life. The logical extension of such a utilitarian model of ethics would dictate that, 'if the choice is between a million dogs and one person [in a lifeboat], it would still be obligatory under rights theory to throw the dogs overboard'. In other words, such is the hubris of human notions of self-worth/position as a species in the grand scheme of life on this planet that one solitary human being still is considered to have more value than a million nonhuman lives.

Karen: *...and we had Buckley's of trying to catch the guinea pigs. We have two free-range guinea pigs and two turtles in a pond in the yard. I had to walk away from that....* (Ex 206)... *...and I had my float there, and I got a mare and foal in it and then tried to get one of my other boys in it but he wouldn't go. I put another little one in and I said "No, just leave him on the side of the road". That was hard. But we just had to fill the float with as much as what we could* (Ex 215)... *We just kept getting those we could and in the end it got to the time of day where I actually saddled up a horse and I got my friend's horse ... she had four horses in the paddock... and I saddled him up and we just had to leave the others behind...it was too late* (Ex 220)... *but it was at the time... driving away from those ones that I left on the side of the road, that was the hardest* (Ex 276)... *yes...to me... I'm not God... I shouldn't be given that decision-making process of who does or who doesn't* (survive). *At the time it really was almost a decision of who is given the right to continue living and who is not...* (Ex 277)

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Kim: *...that's the hardest thing, is leaving your animals behind and knowing that anything could happen to them...*(Ex 489)*… because we are in a country town so everyone's got animals. There's actually not enough… like the high ground is residential, like just a small area, so there's nowhere where you could actually… you know… leave your animals. They* (some people) *just had to let them drown* (Ex 504)

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Kate: *...yeah, yeah… I mean… you're trying to think what you can take yourself, but you've got to think, in my opinion, you've sort of got to think of your animals first. It's a hard one, yeah…* (Ex 529)

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Nat*: ...at that stage we'd lost our fences so the dogs were back inside or back upstairs on the veranda and we just had to leave them there because we had no choice* (Ex 601)

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Terence: *...their* (wildlife rescuers) *focus is on saving the animal. They're assessing it and saying 'Yes.. I can save this… I should be able to save this but it's in a condition where we can't get it safely out' ….some of these big buck roos…they'll tear you open if you get too close to them. They are quite a dangerous animal and they even have to do a risk assessment on that…* (Ex 741)

In this instance, Terence is describing the dilemma of the logistical decisions which the wildlife rescuers must make regarding which animals can be rescued or carried out for treatment, and done so safely, and which cannot. Compounding the dilemma for the rescuers is the knowledge that in their usual capacity they are doing just that – *rescuing* animals. In the circumstances of disaster events they are in the unfortunate

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position of having to decide which animals can be practically saved and which must have their lives taken instead.

Refusal to Leave (RTL) and Defiance of Restrictions (DOR)

As discussed previously, in the literature review section (Chapter 3), a number of writers (see, for example, Heath, Beck et al 2001a [US]; Edmonds & Cutter 2008 [US]; Hunt, Bogue et al 2012 [US]; Glassey 2014 [NZ]; Taylor, Eustace et al 2015b [AUS]) have commented on the phenomenon of the refusal by animal 'owners' to leave in evacuation operations if unable to take their animals with them. Most studies cited by these writers suggest a significant percentage – around half – of participants would refuse to leave without their (mostly, but not solely, companion) animals (RTL). Re-entering a disaster zone before it has been officially declared safe to do so (DOR) also presents as a significant safety issue (Heath, Voeks et al. 2000). One of the clear consequences of the reluctance of 'pet' owners to comply (RTL or DOR) with evacuation or disaster management protocols is the risk they place themselves in – and possibly their nonhumans – as well as that of any emergency service and other public safety personnel involved in their recovery/rescue/removal. Such risk taking behavior is intimately and directly linked with the strong connections people have with their nonhumans and, to them, at least, it would not seem unreasonable to want to do all they could to help them – after all, and particularly, if they are seen as part of the family unit it would (and should) be seen as being an ethically and morally justifiable course of action in the context of commitment and responsibilities toward *family* members.

Refusal to leave (RTL)

Barb: *…Yeah…because people won't typically leave their animals…and I know that from that experience of going out on the properties…people saying 'I'm not going to leave the horses!'…'if we can't get the horses off the property, we don't go!'…* (Ex 60) (In this context, Barb is drawing on past experiences as an emergency rescue officer)

Casey: *The reason we ended up with people at our house was because the evacuation centres weren't really designed for people and dogs….people… I heard on the news… weren't able to take their animals with them…I know the sentiment from my*

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clients (in her animal related business) *was "I don't go without my dog, I don't go without my animals"…* (Ex 340)*… and…* (of herself) *that is a life choice and if you tell me I can't be evacuated because of flood or fire or whatever and I can't take my dogs… I'm not going… I can tell you that right now… I am not going* (Ex 346)

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Kalia: *But then the water just kept rising and rising. Like, it was coming all up their driveway as well and getting closer, encroaching on their home as well. And this is where my daughter wouldn't leave because she wouldn't leave the horse. But it just kept getting higher and higher. In the end she agreed she would leave* (Ex 364)

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Kim: *Well I said "I'm not going, I'm not getting on the helicopter if she* (dog) *can't come", you know. It didn't last long… "You'll be going"…forced evacuation and they weren't risking leaving anyone in town…* (Ex 487)

In the above scenarios the ideals of Kim and of Kalia's daughter were challenged beyond their expectations and, ultimately, their choices of how they would prefer to act were taken from them. In Kalia's daughter's case the unexpected and continual rising of the water made it too difficult to remain and family intervention over-ruled her wishes. In Kim's situation, again in a flooding event, the rescue personnel made the decision for her and she was forcibly removed, giving her no real choice but to leave without her animals.

Lee: *I think the big things that came out of the 2011 flooding was that the issues that were caused by a home owner or a resident of a property either refusing to leave that property because they don't have an alternative for their pet…*(Ex 546)

Lee's comment highlights the consequences of people not having an alternative 'for their pet' but, in the context of her position as a council representative, it also exposes a concealed and taken-for-granted concept. Implicit in her comment is the problematizing of animal 'owners' (and thus the bond they share with their nonhumans) and the 'the issues that were caused by' them. Disaster management

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then (and continues to be) was (is) human-centric. Behind the words 'they didn't have an alternative for their pet' lays the embedded assumption that the onus is squarely placed on the animal "owners'" shoulders and policy makers can avoid the complications of catering specifically for nonhuman family members. Employing Bacchi's (1999) 'What's the Problem Represented to be?' (WPR) approach offers a means with which to a read/deconstruct a text (policy) whereby it possible to expose 'who' is really being blamed for 'what'. As Bacchi (2012:21) argues, '[t]he *'WPR'* approach…starts from the premise that what one proposes to do about something reveals what one thinks is problematic (needs to change).' Another way of expressing this is to ask, 'what is it that is being problematized'? In other words, from a council/policy perspective human bonds with their nonhumans are problematic as are 'non-conformist' behaviours of 'animal owners'.

Defiance of restrictions (DOR)
As for Refusal to Leave (RTL), DOR is a direct consequence of people's personal, and positive, connections with the nonhumans in their lives.

Tess: *Even though we are not allowed to go across the river or anything…we are down here…so we are out in the rural area away from the main part of town…my husband and my neighbour got a boat… came over while the river was still running quite heavily… but they wanted to stop looters and check on the animals…* (Ex 104)

Despite now being an exclusion zone, the two men opted to defy the restrictions and take a boat through the flood waters to check on their properties and their animals.

Tess later entered the exclusion area herself:

Tess: *… I thought "Bugger it, I'm going to still try"…* (Ex 109*) …we joined the queue of cars to come over the bridge…fortunately my driver's licence… and we had all these police officers who had been flown up who weren't from* (place name)*… and my driver's licence actually said* (similar street address)*… and so he looked on all the lists of streets and he said "Your street is not on here, but that looks good. Off you go". He let me through… I felt like a criminal…* (Ex 110)

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Karen: *I know some people did actually sneak back home as I did. I was hooked up with a generator so we came home and I know other people came home even though they didn't have power or anything ...* (Ex 259)

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Kalia: *...so we did that* (entered the exclusion area)*…trying to find the horse...* (Ex 385)*… and that was why they stopped … eventually they stopped people using boats.* (name) *went and got our dogs… they stopped him afterwards from using his boat. The police stopped him then...so… yeah...*(Ex 416)

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Tessa: *My husband then went home and took the tree down* (the tree that had partially fallen and blocked her son's access to their home). *After that, my husband was so worried about his horse, that he decided he'd stay…* (Ex 694)

Tessa's property was in an area with restricted access which had been closed immediately following a significant bushfire. Both her son and her husband defied the restrictions orders in their mission to get to the family home, despite the fact that the danger had not fully passed and the area had not yet been declared safe.

Animals as Priority (AAP) and Risking Life for Animals (RLFA)

For some participants the need to ensure their nonhumans' safety was of overarching importance (AAP) and at least one of the participants was prepared to risk her own safety by heading off into an unknown situation to secure a safe place for her horses (RLFA).

The excerpts relating to AAP are a demonstration, for some, of the depth of connection and their commitment to the nonhuman beings in their lives. For Karen, her level of commitment went beyond the care for her own horses to a determination to ensure the safety of a number of other people's horses (some of these people even unknown to her). This category shares definite overlaps with RLFA below, in that concepts of empathy or altruism, as well as those of deeper, biophilic, connections could be considered in the imagining of what the motivations or impulses might be

for such commitments on behalf of nonhumans, in particular those with whom there is no personal relationship.

Karen: *I hitched up the float to my car and got to the paddock, and in the end I loaded it with horses* (Ex 210)… *I stayed at the paddock and we were knee deep…we are in the middle of summer so I was in thongs and shorts… and we are just knee deep in mud trying to get horses out of the paddock …*(Ex 214*)… In the end I said to somebody… I said, "Take my car". I said to my little girl, "The two dogs and cat are your responsibility. You stay with the car, you stay with those animals. You have got to look after them"…*(Ex 216)… and,

… although, I must admit when I rode the horse out that afternoon and got there and B was there and the other child in the car and that… it was just… I just collapsed to the ground off the horse and I didn't realise how much at the time to send B off on those horses on her own… that really was frightening... (Ex271)... (recalling her first actions on hearing of the need to evacuate)…*and you just sort of froze there and I remember looking…for years you collect this stuff…they are your prized possessions and …no… it's get the dogs and the cat and get in the car…* (Ex 272)… *but, yeah… it was more important to us and that's what we focused on for that part of it… was the horses and our little animals…*(Ex 273) *…when we came home they were still our priority as such. So not coming home until the place was cleaned up …and it took us two weeks to bring the horses home because we had to clean up the paddock and decontaminate it from the rubbish and the mud and everything else that was there too…* (Ex 290)

Karen's immediate reaction was to ensure the safety of 'the horses and our little animals' rather than try and save 'prized possessions'. She had not taken the time to change clothing as their safety was foremost on her mind. By the time she got to the horse paddock, not only was she inappropriately dressed and 'knee deep' in the mud – the horses were also in the mire. This insight gives some idea of the urgency of the situation and of the extra difficulty of trying to manoeuvre the horses in these circumstances. Karen's loyalties were divided but ultimately she chose to allow someone else to take her car, with the cat, two dogs and her youngest daughter away

from the flooded area in order to devote herself fully to the safety of the horses (her own as well as those 'belonging' to other people).

Kalia: *…but I was the person that had my pets with me… and dog food, horse feed, first aid supplies and didn't have any passport, jewellery… all those things that people would take in that sort of situation. I didn't have anything…*(Ex 392*)… yeah, very focused… particularly the horse… yeah… focused on the horse… and yeah… because in that situation …you can kind of pick up a dog but you can't pick up a horse… and there's no food or fresh water. We tied hay nets up in trees for the horses but they didn't …they left from where we …we were trying to find them somewhere that was reasonable ground, and so we tied up hay nets… high in a tree thinking that would be some dry feed for them… but they didn't stay where we had let them go anyway…* (Ex 409)…

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Nat: *I know that they were evacuating people in a hurry and sometimes it is in a hurry. But I can tell you now that if they had told me to get out, the dog and cat would have been in the car. If I could have got out safely before all this happened, I wouldn't have left them here, they would be in the car with me. I might have left a million other things but they would have been in the car with me…*(Ex 657)… *You've only got to look at when you see it on TV… the fires… I mean all those people… they are worrying about the bush, their native animals …as well as their domestic animals too. Everybody takes their dogs and cats with them* (Ex 661)

There are only minor examples of RLFA (Risking Life for Animals) to be found within the participant accounts in this study but it was deemed a phenomenon significant enough to warrant comment on. Various articles can be seen from time to time in news media which tell a story of someone who has risked their own life to save a nonhuman's life[95]. Probably one of the better known Australian instances

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[95] Two relatively recent examples were reported on in Adelaide, South Australia: *The Advertiser,* Wednesday January 8, 2014, page 22, 'Heroic boys help save dogs from fire', Ben Hyde; *The Sunday* Mail, Sunday October 2, 2016, page 14, 'Raves for roo rescue crew', Luke Griffiths. Along similar lines, an article in the *Los Angeles Times,* 'Would You Risk Your Life to Save Your Pet?', November 10, 1993, Lynn Smith, available on line: http://articles.latimes.com/print/1993-10-11/news/vw-55308_1_animal-lovers) describes the death of

garnered national and international attention in various media formats[96]. Ray Cole was photographed rescuing a kangaroo (a wild animal with whom he had no personal connection) from the flooding Bremer River, Ipswich, Queensland in January 2011(Hurst 2011).

The public reactions to Ray Cole's actions were mixed and drew extremes in comments[97] – in itself a demonstration of the deep connections and disconnections humans have with the natural world (nonhuman animals in particular). Indeed, while he received much praise and was even presented with an award from the Australian Wildlife Protection Council[98] for his actions on behalf of the kangaroo, Ray returned home from the ceremony to find his home ransacked:

> (**Text has been removed due to copyright restrictions**)……………They and their children had to move to another property….[99]

film maker Duncan Gibbins following his entering a burning building in an attempt to save his cat. The article describes the ASPCAs creation of the annual Duncan Gibbins Heroism Award in his honour and which is given each year to a recipient who has demonstrated particular courage in saving an animal's life.

[96] See, for example: http://www.qt.com.au/news/rescue-wins-hearts-/749430/, and, http://democraticunderground.com/discuss/duboard.php?az=view_all&address=439x200242

[97] For example, in an article in *The Queensland Times* (on line, https://www.qt.com.au/news/rescue-wins-hearts-/749430/), 21/1/2011, Kate Lemmon, 'Roo rescue wins hearts', Ray is quoted as saying, '"I've been called a lot of things, a hero, a goose, an idiot," he said. "I had 5500 friendship requests on Facebook and more than 2000 messages. Some has been hate mail but what can do you?"'. A similar incident occurred during the November/December, 2017, Californian wildfires. A man rescued a rabbit, running from fire, along the side of a highway. The incident was filmed and appeared in national and international media. As for the kangaroo rescuer, he received praise from some and scorn from others ('Man saves rabbit from fire, sparking controversy', *The Age*, World News, United States, Monday, December 11, 2017, pg14)

[98] Wildlife Protection Association of Australia, 2011, 'Wildlife Bytes', http://wildlifebytes.blogspot.com.au/2011/01/wildlife-bytes-austalia-24111.html, on line 24/1/11

[99] "Roo rescuer's ordeal brings tears', *Brisbane Times*, 26/3/2011, Daniel Hurst, on line , http://www.brisbanetimes.com.au/environment/roo-rescuers-ordeal-brings-tears-20110325-1c9u0.html#ixzz33XDWTpy4

Further underscoring the unstable and, at some levels, deeply irrational[100] dualisms operating within people and the tensions always at play, ensuing media articles on Mr Cole demonstrate to some extent the push and pull of this internal 'dialogue': feelings of compassion and empathy and an instinctive urge to act on a nonhuman's behalf, regardless of potential ultimate personal cost and yet, also a willingness to use animals as a 'means-to-an-end' without any *seeming* internal moral dilemma evident. Around a year after receiving his award for his actions on behalf of the kangaroo, Ray drew media attention after he was charged for an incident that occurred in which he verbally abused committee members in his greyhound racing association[101]. Reading a little more deeply, the articles indicate that, on the one hand, he has demonstrated an empathic/biophilic connection with a nonhuman by risking his own safety to dive into flood waters to rescue an unconscious kangaroo which would have surely drowned, and yet, on the other hand, he is involved in an industry that exploits animals for profit and entertainment.

There were two incidences reported within this project that could be classed as RLFA. While Bianca did not jump into a flooding river or enter a burning building, she was still a very young woman heading off into unknown circumstances on her own, dedicated to getting her horses to safety, and reflecting the depth of the connection she had with them and her commitment to them, despite her anxiety about her situation:

I grabbed my two horses out and then I got on one and led the other and I just rode away from all of the others. So I had no idea what was going on and what horses were left and going to get out and stuff, and I was very upset and I didn't know where I was taking the horses either. I just kind of followed the other pony that a guy across the road was taking…(Ex 175)… when I was riding my two horses to the

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[100] As noted at the beginning of Section 2 (page 10), Francione (2008:Loc 136) describes this ever present ambivalence of in/decidability and the entangled moral/ethical paradoxes bound up in our actions toward, and our thinking about our moral duties to, nonhumans and terms it *moral schizophrenia* (Francione, GL, 2008, *Animals as Persons: Essays on the abolition of animal exploitation*, Columbia University Press, New York

[101] letsgohorseracing, 10/1/2012, 'Flood hero outed for six months as greyhound trainer then threatens RQ staff', on line, http://www.letsgohorseracing.com.au/index.php/oz-a-os-news/qld-a-rest/2073-flood-hero-cops-six-months-as-greyhound-trainer-then-threatens-rq-staff

other place, I was crying nearly the whole time not knowing whether my other horses were going to be able to get out and that sort of thing...(Ex 184)

Barb recounts an incident which occurred during the Canberra fire storms, 2003[102], and in which several people risked their own safety to rescue some dogs from a burning building. In this instance, there was no personal relationship between the people and the dogs.

Barb: *...this couple came along and they saw buildings on fire and they actually entered the property ...they were trespassing and they actually fought the fire off and they saved a building with animals in it! ...* (Ex 54)

Superficially, at least, it might seem logical/obvious as to why someone who has a deep personal connection with, or attachment to, an animal would prioritise that animal's safety. But what of the situations in which there is no personal relationship between the human doing the rescuing and the non-human being rescued by them? Speculating about motivations for acting on behalf of animals in this manner leads to the consideration of several possible theoretical underpinnings, as discussed next.

Further perspectives on the nature of connections
It might be possible to consider such actions in terms of morally considerate behaviour. Bandura (1991:58) notes that the impetus for moral behaviour is multifaceted. One aspect pertains to the sense of being bound by legal compliance – not relevant in Ray's situation, as, in fact, he was acting against the advice of police officers at the scene[103] .

Another aspect relates to social expectations (Bandura 1991:58) which can include pressure to conform to expected social mores, or even the expectation of benefitting socially in some way. So, in this case it might be possible that the expectations of his son motivated Ray:

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[102] An account of this incident appeared in *The Canberra Times,* on line, 19/1/2013: Clive Williams, 'The road to devastation' http://www.canberratimes.com.au/act-news/the-road-to-devastation-20130118-2cyxi.html

[103] Staff writer, January 25, 2011, 'Roo rescuer honoured with award', *Herald Sun*, http://www.adelaidenow.com.au/ipad/man-who-saved-kangaroo-honoured/story-fn6t2xlc-1225994573799

> "My son looked at me [as we stood near the river] and said, 'Can you save the roo, Dad?'" Mr Cole recalls.[104]

If this was the explanation then it was not a broad social 'reward' that he was seeking but a much more limited and personal social one. It is still possible ask if this is a profound enough reason for Cole to risk his own safety, particularly in full view of his young son? From his comment below it seems that the expectation of social reward is not (immediately) a primary motivator.

> "Before you knew it, I was neck deep in water saving the roo. It was one of those spur of the moment things; the way I was brought up in Melbourne was to lend a hand if you can and it wouldn't have mattered to meet whether it was a roo or a human, you know, I would have been in there." [105]

It is heartening that, in this situation, Ray made no distinction between a human in need and a nonhuman in need. This speaks of a 'nibbling away' at the human/nonhuman barrier. Yet, Ray's role in the greyhound industry simultaneously reveals a reinforcing of it, and the $\frac{Human}{Nature}$ binary opposition is, as ever, at play.

In Bianca's situation, it certainly seems even far less likely that she was motivated by social expectations or compelled by legal compliance. She was deeply concerned for her horses' safety. Social expectations or legal compliance would seem more likely to be motivators associated with human to human drivers of moral conduct.

Discussing the motivation and goals for empathic behaviour, Batson, Batson *et al* (1991) describe *empathic joy*, whereby they postulate that one moves from a state of empathic concern to a state of empathic joy. They argue (pg. 413) that the 'empathy-altruism hypothesis, which claims that the pro-social motivation evoked by empathy is directed toward the ultimate goal of increasing the welfare of the person in need…' whereas with the empathic-joy hypothesis, the key motivation of an empathic act is in the reward (of the sense of joy) that ensues. While empathic joy can be experienced under the empathy-altruism model, it is a consequence of the empathic act. In the empathic-joy model, the joy experienced is the goal. Given this

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[104] Daniel Hurst, March 26, 2011, 'Roo rescuer's ordeal brings tears', *The Brisbane Times*, on line, http://www.brisbanetimes.com.au/environment/roo-rescuers-ordeal-brings-tears-20110325-1c9u0.html

[105] Wildlife Protection Association of Australia, 2011, 'Wildlife Bytes', http://wildlifebytes.blogspot.com.au/2011/01/wildlife-bytes-austalia-24111.html, on line 24/1/11

model it would seem a reasonable motivator to act on behalf of either a human or a nonhuman if the goal of the action is to experience the reward of joy for helping another in need: the act itself then, is not driven by expectations of social reward or social acceptance/benefit or expectations of reciprocity – as altruistic acts tend to be (Fehr and Fischbacher 2003) – but by much more personal motivations. It is a bio-socio-cultural model then that does not require differentiation between human and nonhuman for it to be applicable and is, in this sense, holistic and inclusive and one in which boundaries are non-existent/irrelevant.

While Angantyr, Eklund and Hansen (2011:369) note that there has been research devoted to inter-human and inter-animal empathy, they observe the 'dearth of research comparing humans' empathic reactions to humans and animals'. The results of their experiment suggest that humans feel 'at least' as much empathy for nonhumans as for humans.

Taylor and Signal (2005:25) link the human-human capacity for empathy and the valuing of nonhuman life, suggesting the link is 'significant'. In their 2007 study, Signal and Taylor (2007:129), write of demographic and personality types and empathy toward animals and conclude that a link exists between human-directed empathy and attitudes of empathy toward the way nonhumans are treated but that more study is needed to determine causalities.

Decety (2011), Decety and Jackson (2004) and Decety and Lamm (2006) argue empathy is such a complex phenomenon that a combination of social psychology and cognitive neuroscience (or a multidisciplinary approach) serves to explain it more fully than one or other of these approaches do alone. Decety (2011:36) notes (while advocating caution about broadly generalising across the animal kingdom) the neurological mechanisms that support the basic affective states for empathy are 'homologous in all mammals'. He further states (pg. 37) that 'animal data on maternal care and nurturance suggest that primitive empathic ability might be organized by basic biological systems subserving a complex of attachment-related processes'. The release of neuropeptides, including and particularly, oxytocin, are involved in regulating attachment and empathic behaviours: the release of oxytocin is

involved in the capacity to overcome/ignore risk in order to engage in prosocial behaviour and social interaction.

Bradshaw and Paul (2010:107) posit, along with cognitive components of human to nonhuman empathy, evolutionary advantage and the "possibility of an analogous 'biophilia'" (something which they note has been under-researched) directed towards other animals' is a key explanation. They go on to speculate that individuals or kin groups who were able to empathise with nonhumans may have had an evolutionary advantage in successful hunting and, later, in the ability to herd and to domesticate nonhumans.

Schulz, Shriver *et al* (2004:31) theorize that the connection that humans feel with the rest of nature/nonhuman animals is 'implicit, and exists outside of conscious awareness' – that it appears to them that a sense of connectedness is instinctual and not something that is consciously considered. They note, however, that the degree to which people feel connected with nature is impacted on by the 'types of attitudes that s/he develops' (pg. 40). In other words, socio-cultural conditioning plays a role in the degree of dis/connectedness that a person feels.

de Waal (2008) arguing from an evolutionary biology standpoint, notes that, when trying to explain/define altruism, the effects of the act of altruism should be separated from the motivation for the act – that explaining the phenomenon in the context of the two (evolutionary biologists argue the good of a behaviour , where-as psychologists are concerned with how a behaviour came about) does not offer sufficient clarity or logic and suffers 'from a lack of distinction between function and motivation' (pg. 280). de Waal (2008:279) advocates that empathy underlies 'directed altruism' (a response to another's urgent need) and that it is a 'phylogenetically ancient' mechanism in all probability as old as the emergence of mammals and birds. It is a phenomenon not confined to humans and de Waal offers examples of empathic behaviours in other species (pg. 282).

While de Waal's 2008 paper demonstrates that explanations of empathetic and altruistic behaviours are highly complex, he offers a particular example from which it may be possible to extrapolate: he describes (pg. 289) an incident in which an adult chimpanzee (who are typically fearful of water and cannot swim) lost his life diving

into water to save a young chimpanzee which had fallen into the water due to its mother's inattention. As de Waal argues,

> It is hard to imagine that the chimpanzee's extreme hydrophobia could be overcome by a cognitive gamble on future returns. A male who jumps in the water must have an overwhelming immediate motivation, which probably only emotional engagement can produce.

He further contends that empathy, as a driving mechanism of the need to offer assistance to others in need, is 'relatively autonomous in both animals and humans'. As a consequence the urge for empathetic behaviour has passed beyond its original evolutionary programming such that, for example, humans give to help unconnected others in remote (to themselves) locations and primates are prepared to offer help to those not of their personal kin group (pg. 289). Viewed in this light of sharing common origins and sharing similar cognitive programming it becomes easier to imagine why humans will act out empathy for another being not of one's own kin or kind – and is a demonstration of deeper biological connectedness.

Writing on interspecies bonds and, in particular, human and nonhuman primate bonding, but departing from Wilson's 1984 concept of *biophilia*, ('human fascination with life'), Rose (2011:245) offers the concept of *biosynergy* ('mutual enrichment of life'). He contends, 'biosynergy promotes complex collaborative interspecies bonds that broaden the conservationist's desire to enhance synergy among all organisms in an ecosystem'. If this innately, biologically, driven phenomenon operates at such a deep level in one kind of group of humans (conservationists) should it not be possible to extrapolate to all other 'groups', more broadly, or individuals, in particular, that have an interest in the well-being of nonhuman beings? Again, this would be a demonstration of a deeper biological/biophilic connection.

Cooperation Between People For Animals (CBPFA)

Several participants describe situations in which they, or people they knew, were willing to cooperate with other people in their community to assist with helping nonhumans with whom frequently there was no personal relationship (and in some instances, no personal relationship with the Person/s In Care [PICs] of the animals). Actions to assist included the willingness to take in both, people (known or otherwise) and their animals, into their homes or properties; helping to rescue the animals of others from immediate danger; or helping to remove them to safer areas

when the PICs are prevented from doing so themselves. Times of disaster can be seen as an 'opportunity' for people to come to the assistance of nonhumans other than their own, demonstrating their willingness for cooperating – opportunities that are not presented in usual times.

While many of the features of empathy and altruism discussed above are relevant to this section, some notes on the nature of cooperation are called for. For instance, Vollmer (2013) employs a paleo-biological analogy when he discusses his concept of *punctuated cooperation*[106] which is based on the theory of punctuated equilibrium in evolution as argued by Stephen Jay Gould and Niles Eldredge (Gould and Eldredge 1977; Gould and Eldredge 1986; Gould 1993). Vollmer posits that using the biological model in analysing social disruption (including natural disasters) encourages considering: how such disruptions take place; how they are 'spread, escalate or die down' (2013:13); and how this affects/transforms the 'evolution' of/equilibrium of cooperative behaviours in a collective. Discussing 'organizations confronting disruptions' he notes,

> [i]n the wake of disruption and disaster, co-operation among members of a collective is refocused on matters of status, membership and the formation of coalitions' (2013:Loc 3)… [m]embers seemed to effectively redistribute their attention under disruptive circumstances, withdrawing attention from formal regulations, norms or roles and re-investing into one another' (2013:Loc 114) .

Building on this, and arguing for a biological basis for humans cooperating to help the animals of others, it could be argued that in such emotionally charged and extreme situations as disasters, culturally created barriers are eroded and 'our' nonhumans become a part of the group/social collective – that an inclusive 'one another' forms. That, at such times, humans withdraw from cultural 'restraints' and retreat to the immediate, the more fundamental and the more personal. That even though there is not ordinarily a 'relationship' *per se*, in such extraordinary circumstances 'the collective' is that which is in the immediate and the usual barriers are non-existent and 'species' distinctions are irrelevant. In a similar argument, Tidball (2012, on line) posits that, when experiencing disasters, humans (individuals and groups) are driven by an urge to seek out closer association with nature. He

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[106] Gould and Eldredge (1977) proposed that when change occurred in evolution, rather than as in the model for gradual change, it was closely associated with sudden and rare geological events. (Gould, Stephen J & Eldredge Niles, 1977, 'Punctuated equilibria: the tempo and mode of evolution reconsidered', *Paleobiology*, Vol 3, No. 2, pp 115-151)

names this drive *urgent biophilia*. Tidball contends that the trauma/shock of such highly emotionally charged situations forces humans, as integral parts of interdependent systems (social ecological systems [SES]), to reawaken senses of deep connection with the rest of the natural system. This is done with the desire to restore a sense of inner balance as well as harmony/function in the natural system. Increased resilience across the SES is a potential result.

Arguing from a different, sociological, perspective, De Alessi (1975:127) suggests,'[t]here is evidence that, in the period immediately following a disaster, cooperative behaviour increases.' He discusses several models that hinge on the social benefits of cooperative behaviours, including *utility interdependence,*[107](individuals derive personal value from increasing the welfare of others), *alliance hypothesis*[108] and *informal insurance*[109] (in the latter two, the strengthening of social alliances and a hope for *quid pro quo* are the goals).

Barb: *…yes, so she* (daughter) *went to* (friend's name) *house…they've turned up …'we're all here, cats are fine…shut 'em in the bathroom, laundry or somewhere… you know…we're all good for the night'!* (Ex 37)

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Tess: *…I rang him* (neighbour) *up from the evacuation centre to see how he was going and he said that the good news was…because our neighbour is in a shed next door… he stayed in his shed and he was on the other side of the river....and he …said he had found* (dog) *-* (dog) *was up on the levee bank under one of the tractors that had been put up there out of the water* (Ex 97) *… they* (other neighbours) *told me* (one of Tess's horses) *was lame but they cleaned up her foot and put ice on it …and they were checking them for us and feeding them and that was fantastic. It was fantastic people like that…* (Ex 115)

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[107] Dacy DC, HR Kunreuther, 1969, *The Economics of Natural Disasters: Implications for Federal Policy,* New York

[108] Hirshleifer J, 1967, 'Disaster Behavior: Altruism or Alliance', in *Economic Behavior in Adversity*, University of Chicago Press, ed J Hershleifer, pp134-141

[109] Douty CM, 1972, 'Disasters and Charity: Some Aspects of Cooperative Behavior', *American Economic Review,* Sept, 62, pp580-590

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Bianca: *...that morning that the floods happened we got all the horses out. There was over 20 of them, I think maybe 25 or something. We got them out and we took them across to another part of town which didn't get flood affected or anything* (Ex 160) (only a small number of these horses were her own)

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Karen: *My car and float left and I stayed at the paddock and we were... another float would turn up and we were just trying to get out the horses we could...* (Ex 217)*... most of the other horses in the paddock belonged to people on the other side of the river so they couldn't even come over to help. They had already been blocked off. The bridges had already been closed for 24 hours, 36 hours by then...* (Ex 218)

At this stage Karen was prepared to be parted from her daughters (the older girl had left with her two horses and the younger girl, with the cat and two dogs, had been entrusted to someone driving Karen's car) so that she could focus on saving as many horses as possible, most 'belonging' to other people. In one sense, she was exceptional in that she prioritised the horses' safety over her daughters and the animals in their care.

Karen: *I had 9 kilometres to ride and someone else had actually walked up and was helping me. She said "I can ride with you too", but she's in shorts and bare feet. She jumped on one of the horses bare-back...* (Ex221)*... she led one, I led one and then another one followed us who is dependent on the one I led. He's blind in one eye, his hips are gone and he just followed us like a dog the whole way. They just knew. The ones we got out, they just came...* (Ex 222)*...and...*

Karen: *I organised the next morning for another paddock, to have that for two weeks. We left a lot of the horses that we got out of the paddocks... other people came and got them... but my friend's horses and all those that we knew who couldn't get there... so I ended up with the nine horses and got a paddock just across the road...*(Ex 229) *... we had no-one else in town and having all the horses and animals*

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that we did, it was a bit of a decision for us to stay to look after all them and be close to them, given we were doing it for us and several other friends as well...(Ex 265)..

Karen acknowledges that it was a commitment to stay behind and not a decision taken lightly to look after her own animals and those of other people's. Her actions demonstrate a willingness to step beyond her own personal ties to her own nonhuman family. It is possible to interpret her actions in light of both, social gain as well as from a biological explanation for the willingness to assist her broader immediate 'collective' which included all of the animals in her direct vicinity.

Kalia: *…but our dog … there was… were people in a street nearby who didn't leave, who had a boat. So the next day … I am not 100% sure of the connection but they, with their boat, went and got our dogs where we'd left them and also got that old couple and their old dog as well too… and somehow met up with a police boat, met up with a friend with a roundabout, and then took our dogs there…* (Ex 382)

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Bianca: *… and at one stage we had to go through water to get to the other side and one of my horses refused to go in, so there was another girl who had her bird on her shoulder to keep it dry, she led one of my horses in for me and just a lot of people were really helping me with them...(Ex 186)… they were just people* (that offered help along the way) *that were nearby in the school using that as a shelter …and they'd just come out and help me …and there were some people who were in the middle of pulling stuff out of their house to take with them …and they would stop doing that and they would ask me if I was okay and stuff...(Ex 187)*

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Kalia: *Our horses actually, like from where we left them… like… piecing it together from the neighbours… they actually went back to where their paddock was …but it was like a house size hole in the road. One was stronger and one wasn't. One horse is strong so it swam… it could swim across and into another street that wasn't flooded… but the other horse has got a few problems so it actually got …apparently*

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got washed down and kept trying to swim back…and then some people saw it and they got it to a gate and a fence …and got it back where the other one was…(Ex 383)… and then what happened was somebody… because everybody knew… because we lived in a suburban area and we had horses and used to ride them every day… so everybody knew us and who our horses were…and in the end a police officer from further down our street walked the horses… apparently… down where the bridge is close to town… so they walked the horses up to a school for us…and then because everyone knew we were looking… or somebody who called somebody who called us… and then we could go and get the horses as well..(Ex 388)

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Tessa: *…a friend of mine who lives a couple of kilometres away from us … the fires came very, very close to their place. She was talking about her horse… her pony horse and her lambs…she has two lambs and a tiny horse…their big horses they send to the pony club… but what was she going to do with the two lambs and the tiny pony? My son said "You can put them in my backyard, that's for sure." They are the sort of things… if you have animals… you are very aware of in this area* (Ex 709)… *Another thing… I know that local people offered… you could ship out your horses. I know that that was happening. People were offering horse floats and paddocks and things like that* (Ex 710).

Impact Of/On Bond (IOB)

The interplay between disaster events and the deep personal connections between humans and their nonhumans can have significant consequences. The bond can impact on how humans act in times of disaster (impact *of* bond/IOB). Aside from the other aspects of bonds discussed above, a strong bond can mean greater chances of successful human and nonhuman evacuations (Heath, Beck et al. 2001a) or it may lead to people jeopardising their own safety to remain with, or attempt save, their animals (Trigg, Thompson et al. 2015b). It can also mean that some (as with the elderly couple that Kalia speaks of, below) will sacrifice their own well-being in order to ensure that of their animals. Or, conversely, a weak bond may mean that an animal's life is at greater jeopardy if its needs and safety are not appropriately

<p align="center">185</p>

catered for, or given adequate consideration in advance of a disaster, by those directly responsible for its welfare (Heath, Beck et al. 2001a).

The bond can certainly be impacted on by a disaster (impact *on* bond/IOB), whether by the creation of a separation between a person and their nonhuman (temporary or permanent) or by the forcing of decision making that will affect either the person, their nonhuman or, both.

In Tess's, Nat's and [Kim's] situations, they experienced evacuations where they were given no options and had to leave their nonhumans behind. Tess, who was unable to get her horses out sooner due to the speed of the rising water, describes the sense of helplessness in her situation and her fear of losing her horses[110]:

What happened next? Basically it was more about I couldn't look. The situation was now so bad and …the water was going to go higher and higher and they were saying they didn't know when it was going to stop… (Ex 93)…it's very sparsely populated out here and I actually got to a point where I had given up hope on the horses, so I just decided that I would get my last photo and I wouldn't look at them again. I didn't want to see them get washed away (Ex 94)… Eventually the horses were still on the levee… like… when the Black Hawk came I was worried about that, when the Black Hawk came because I thought that they might get a fright. Normally they'd all shit themselves … sorry about the language … I think they would. I did think if the helicopter came down and started hovering… basically over the top of the house…so I didn't look at them either during that… (Ex 96)

Tess was worried that if the helicopter frightened her horses and they tried to escape from the levee they could either become injured (and increasingly vulnerable due to that) or drown. Her bond with her horses was such that she did not want her last memories of them to be images of suffering. The fear of losing her horses would have heightened any stress she was already feeling in the circumstances. As Barrenechea, Barron & White (2012:1238) note, 'when pets are lost during a disaster event, the psychological distress to the guardian exacerbates the effect of the emergency, prolonging the recovery period…'. Although they write of 'pets' and

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[110] Having personally seen photos of Tess's property under water it is all too easy to understand her fear – her home, sitting atop a small rise, looked like it was alone in the middle of a vast inland sea.

horses are, generally, not placed in the category of companion animals (Every, Due *et al*, 2016:359,371), the connection that Tess feels with her horses is a deep one regardless of the categorisation of the relationship.

When Tess returned home, days later, and speaking to the strength of the bond she shares with them, physically reconnecting with her horses was a priority:

The first thing I did is I went over to the horse paddock just to check on the horses (Ex 116)*… we were so happy they were alive and I wanted to actually just go and touch them…* (Ex 117)

Kalia recounts the situation of her elderly neighbours who had an aging dog who was deaf and blind, making it particularly vulnerable. As a consequence of the strength of the bond the couple had with their dog, and their commitment to it, they chose to forgo any comforts for themselves and slept on the floor of an open shed in order to remain with and care for it. In the course of her account of her experience Kalia refers to them several times:

 Like the older couple that we'd gone to, who had this very elderly dog that they wouldn't leave… and they were an older couple themselves… and it just seems wrong that people are staying (Ex 391)*… Our elderly neighbours, when they eventually were evacuated, well they had to sleep in… like… a big open shed with their dog. There was only two people that had dogs there. So they were sort of put away from everyone else in a big open shed* (Ex 437)*… but it doesn't seem right for an elderly couple to be sleeping in an open shed on a pet's bed when you've got no family. They hadn't been in* (place name) *a long time, so …and they are bushies and they were happy with their circumstances…but it seems a bit rough when you've lost your home to be sleeping in an open shed to have your dog with you* (Ex 439)

The bond/commitment the older couple felt for their elderly dog was so strong that they were prepared to risk their own safety to stay behind before they, and their defenceless old dog, were all eventually rescued by a community member with a boat. There appears to be a dearth of literature on the connection between the strength of the bond between people and older dogs, although a study by Marinelli, Adamelli *et al* (2007) indicates that the bond is deeper when as a result of longer

relationships[111]. Given this then, it not unlikely that the emotional impacts experienced at a break in this type of deep bond would be more pronounced than usual. A number of papers have been written on the benefits to older people's health in having animal companionship (see, for example, Siegel 1990; Raina, Walter-Toews *et al* 1999; Parslow, Jorm *et al* 2005). Any opportunity to ensure this relationship is maintained will be a more positive outcome for the animals, their humans and society in general, through potential reduction in health care demands, at least. Although Jorm, Jacomb *et al* (1997) argue there is no conclusive evidence of this from their study, a more recent, long range, Australian-German project conducted by Headey, Grabka *et al* (2002) concludes there are definite benefits to healthcare systems.

In regard to the elderly couple mentioned above, even under ordinary circumstances, their dog was important to them and was their family, but would be even more so when they had lost everything else. Various studies acknowledge the values of human-companion animal relationships (see, for example, Beck and Katcher 1996; Headey 1999; Headey, Grabka et al 2002; Beck and Katcher 2003; Parslow, Jorm et al 2005; Campo and Uchino 2013) Not only would it be unfair to differentiate between younger and older animal 'owners', it would be impractical as any defining age limit would be arbitrary and open to debate. Seeking a more understanding and compassionate approach for the continuation of the contact between people and companion animals during times of disaster deserves a higher priority. If these animals are 'family' as most 'owners' claim (and as the multi-billion dollar pet/companion animal industry 'indoctrinates') then the problem of 'pets'/companion animals in disasters needs to be re-framed when policy is being constructed, to include *all* family members.

Nat describes a consequence of the disaster on her bond with her cat (her constant worry *about* her cat – as well as her need to have her cat close to her) and a consequence of that bond on her disaster experience (her worry *because* of her cat):

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[111] McGreevy and Bennett (2010, 'Challenges and paradoxes in the companion-animal niche', *Animal Welfare,* 19(S): 11-16), while stating that older dogs can hold less appeal than younger ones, note they are 'more dependent on, and needful of attention from, their owners' (pg11).

…and I was constantly worried about Tilly (cat)*… because she was stressed, I was stressed and because she was making so much noise… people were trying to sleep beside me and they couldn't sleep because she was making so much noise… but I had nowhere to put her and all I could do was just muffle her sound with a couple of coats that I'd scrounged up …* (Ex 664)

It was important to Nat to maintain her close physical connection with her cat – 'I suppose I'd lost so much, I couldn't stand it if I'd lost her as well' (Ex 633) – and to not have that would have been distressing, but worrying so much about the effect of her cat's 'noise' on the people surrounding her was also distressing her.

Brooke also describes the comfort in having the physical closeness with her dog, Seb, on the first night of the flooding event which left them homeless:

Brooke: *… he was such a source of comfort for the two of us as well. I just can't imagine not having him with us…not being with him …and I remember that night…sleeping…because Seb was…never allowed on our bed... but then the three of us* (Brooke, her partner and their dog, Seb) *on the bed hugging together and just… you know…crying…*(Ex 319)

As Tess, Nat, and Brooke describe the particular desire to have physical contact with (and the comfort that comes with this) their animals, it is as if there is a need for the melding of closeness in all of its dimensions – physical, emotional, spiritual and biological, with the obliteration of culturally defined barriers, in order to feel a sense of re-immersion fully into a state of connectedness with their nonhuman beings. In other words, there is a tacit, perhaps not even recognised at a level of overt awareness, need to acknowledge, reconfirm and re-inforce, their deeper connections. Indeed, their actions can be seen as a demonstration of the need for the re-immersion that Tidball (2012 online) discusses when describing *urgent biophilia*.

Emotional Response (ER)

The excerpts in this section still are deeply entwined with notions of empathy and deeper connections to nonhuman life but have been separated out as they display particular aspects of such connections and are deserving of their own segment. Some further comments on empathy are offered here to underscore and enrich those in the

above section on Animals as Priority/AAP and Risking Life for Animals/RLFA. In the following excerpts, the recounting by the participants of their emotional reactions to their witnessing of the suffering of the nonhumans caught up in disaster events suggests deep biophilic or empathic connections. Although limited by word constraints in this project, it is an important phenomenon, worthy of more attention generally. Indeed, Bekoff (in Gruen, 2015:Loc 95) notes the importance of greater understanding of the role of empathy in improving life on this planet for all beings, '[a] focus on empathy is just what is needed to make the world a better place for all animals, human and non-human alike.'

Gruen (2015:Loc 183-Loc194), acknowledging the many aspects of empathy, defines her specific use of the term *entangled empathy*,

> …a type of caring perception focussed on attending to another's experience of wellbeing.
>
> An experiential process involving a blend of emotion and cognition in which we recognize we are in relationships with others and are called upon to be responsive and responsible in these relationships by attending to another's needs, interests, desires, vulnerabilities, hopes and sensitivities.

Gruen (2015:Loc 305) points out that trying to find solutions to problems by only considering limited/simplistic moral 'evaluations' in regard to answers to human-nonhuman relationship problems– what Kheel (1993, cited in Gruen, 2015:Loc275) calls 'truncated narratives' (in which the attempt to solve an ethical problem in incomplete context leads to a specious argument) and the establishing of the binary of hero and victim that this creates – will never find full and satisfactory solutions to moral /ethical problems, and thus to the way we treat nonhumans. Gruen (Loc 305) argues, '[t]raditional theories tend to ignore or downplay not just the meaning of the relationships we are in, but the way those relationships shape who we are.' As such, and as is fundamental to a holistic environmental ethos, it can be argued that acknowledging complexity will mean more inclusive solutions will be a result. Gruen states (Loc 886),

> Our relationships with human and animal others co-constitute who we are and how we configure our identities and agency, even our thoughts and desires. We can't make sense of living without others, and that includes other animals. We are entangled in complex relationships and rather than trying to accomplish the impossible by pretending we can disentangle, we would do better to think about how to be more perceptive and more responsive to the deeply entangled relationships we are in. (Loc 886)

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Gruen (2015) argues that contiguity (both in the spatial sense as well as the emotional) with a nonhuman (or this could even mean species), and the type of relationship, will have an effect on the nature of the entangled empathy, which, in a kind of circularity, then affects the relationship. In this light, and in that of Kellert's (1993:43-59) classification of the way humans value nonhuman nature[112], it can be argued that Ray Cole was able to empathise with a particular nonhuman that he had an uncomplicated/undemanding, non-relationship with but failed to show the same empathy with the larger group of nonhumans (greyhounds) that he had a different (utilitarian) relationship with.

The following two excerpts demonstrate the complexity of entangled empathy in relation to proximity. The two participants were entirely physically remote from the nonhumans that they were feeling distressed for/empathetic toward[113].

Kim: *...I mean, I cried every time I saw the things on TV with animals. Did you ever see that…between here and Brisbane and two horse… a helicopter had spotted them, there was two horses …and it was a shed, a big shed with just the roof …on the roof, and they were treading water, just to stay… you know… they must have been so exhausted… and they actually saved those horses…. I'm in tears watching that… Oh my God…*(Ex 512)

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Kate: *…it breaks my heart when I read about all the wildlife and all that sort of thing….*

The following three participants offer a glimpse into a more unique and extreme aspect of deeper connections in that they were each involved in the taking of nonhuman animal life in situations of disaster. For this reason, their relationships

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[112] Kellert's 1993 classification for the valuing of nonhumans was offered in more detail in Table 1, page 16
[113] Similarly, in reference to the article previously mentioned in footnote #24, an emotional debate took place amongst contributors to the forum connected with article. Many of them expressing strong views (some quite hostile) about the perceived guilt, or not, of the actions of the owners of the boarding kennels in which many nonhumans suffered and/or perished. [http://www.adelaidenow.com.au/news/south-australia/dozens-of-pets-perish-as-tea-tree-gully-boarding-kennel-and-cattery-hit-by-adelaide-hills-bushfire/news-story/92be51251fdad2d2f65d1f752f69d238]

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with these nonhumans, in particular, (and in some instances, more broadly) can be seen as among the most dualistic of any of the participants in this study (based on the assumption that none of the others participants had ever knowingly taken the life of a nonhuman). Given this, the declaration of their sense of empathy (and the depth of it) is even more profoundly revealing and serves to underscore the intensely dichotomous relationships that humans are capable of with nonhuman others – at certain levels feeling deeply connected and, yet, at others the same people can live their lives in in a kind of oblivion about the way they are connected, seemingly not consciously aware that there is even any connection at all.

Davis: *...to even go there was bad enough ...but to actually be involved then… in destroying the poor animals that had been burnt by it… that was… it was bad…some of the guys were… yeah… they generally described… I would have said… being marginally traumatised as a consequence of it, themselves… and I guess anyone that has to kill an animal ...and, frankly… in many ways… a thankless task in destroying animals with their hooves burnt off and their ears burnt off and all this sort of thing… is just terrible. But it had to be done. Public service duty, if you like. So there you go.* (Ex 792)

 In a mostly pragmatic account of his fellow shooters' efforts in the euthanizing of injured animals, Davis briefly makes clear just how much some of these animals were suffering. He comments that the shooters' efforts were 'in may ways' a 'thankless task' that was 'just terrible': to be confronted by animals in such a desperate state and to be taking their lives to end their suffering while knowing that, for the most part, they will receive no thanks for doing so, is something that 'had to be done' and could be considered a 'public service'… 'But it had to be done. Public service duty, if you like. So there you go'. Immediately following his short, but graphic, description of the injuries to the animals, Davis finishes his account of the shooters' involvement with three terse statements, 'capping' the possibility of any further expressions of sentiment on the topic – or at least reflecting discomfort with discussing such deeply emotional issues with a researcher. However, given this was a face to face interview, Davis' demeanour and facial expressions betrayed his guarded-ness and revealed discomfort when recounting the animals' suffering.

Dan: *I know, as hunters, if affected us a great deal. It certainly affected me. I've never felt quite so affected as... I was.... surprised actually* (Ex 818*)...and ...yeah... I think... I don't know whether* (name) *and* (name) *said the same, but I know it certainly did affect me...* (Ex 820) *... and that* (taking the lives of injured animals) *gets to you after a while* (Ex 825) *... but you understand that it's got to be done...because you also feel so sorry for the creature because of the suffering he's gone through...* (Ex 826)

Dan is a seasoned hunter yet he was profoundly affected in a way that surprised him. The situation confronted his usually overtly held values of the 'naturalness' of his rights as a hunter. While he confided in the interview that he always set out to take an animal's life as 'quickly' and 'cleanly' as possible in order to minimise suffering[114], it was not until he witnesses such obvious misery in the injured animals that he became overtly aware of his empathic connection with them.

Tyler: *...so...yeah...that was really sad* (that a neighbour died due to injuries received in the disaster)*...but that didn't get to me as much as...the...shooting the dogs...* (Ex 853*)... I'm here like this...talking about it...and I'm tearing* (crying)*......that always happens......the dogs, I think...that just ...that was ...that was probably the most shocking thing for me...as I said ...that affected me more than the guy that died...*(Ex 861)...

Tyler's experience was several decades ago, during Cyclone Tracy, but he still has an emotional response to his involvement in the culling of 'pet' dogs in the days after the event. A more detailed discussion of his (and Dan's and Davis') experience will offered in the next chapter under Taking of Animal Life/TOAL in Theme 3/ Disconnections, page 212. For the moment, attention is being drawn to the fact that, even after such a long time has passed since the event, Tyler is still emotionally affected to the point of tears and still carries feelings of guilt over his actions, which he continues to regret. As he states, the shooting of the dogs upset him more, then and now, than the traumatic death of his neighbour.

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[114] I offer this statement in the context in which it was given to me and I make no moral judgement here about Dan's (or any of the hunters) explanation for his actions as a hunter. My aim is to offer a demonstration of the types of dichotomous relationships which abound.

The following forum comments are each an expression of an emotional response to the plight of animals left behind during a disaster event (in the first comment it is the imagined scenario that causes the emotional reaction). They have been included in order to add to the examples of emotional response (ER) found in the participant responses and to underscore the notion of the types of emotional response that can be elicited at the suffering of nonhumans. Each comment demonstrates an emotional response felt for the suffering of nonhumans in a location remote from the person expressing the response.

Forum comment: *If I had to leave my dogs behind and they didn't survive then I think it would haunt me for the rest of my life. I've actually had nightmares about this very thing before and woken up feeling physically sick* (Ex 976)

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Forum comment: *I was in tears again watching the news tonight, some south african* [sic] *girl went back to her house and found her house mates* (sic) *dog sitting on a mattress out the front of their house. I'm sad because this poor dog was left behind, but happy because it's alive and so excited to see his mates. They took him back with them on the boat as the water is still about waist high* (Ex 1025)

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Forum comment: *I could never leave mine behind. I was wondering what happened to the pets when they say people were evacuated. I never knew you had to leave them behind though. Makes me feel sick to the stomach too. I wonder how many were left behind with these floods?*(Ex 1032)

The following paragraphs offer a summary of the material provided in this section (Chapter 6).

Summary

This chapter of the thesis has been devoted to demonstrating types of connections to nonhuman animals that can be evidenced in the participants' accounts (in keeping

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with Aim 2 of this project). The quotations offered at the start of the chapter are also a demonstration of the ways that notions of connectedness are not new nor confined to particular kinds of thinkers. Sadly, so far, such expressions of understandings of connectedness are not those of the majority – yet!

Several theoretical perspectives were offered as a means of gaining some deeper insights into the connectedness between humans and nonhumans (and, indeed, between mammals more broadly). These perspectives draw on the fundamentally innate, biological or evolutionary adaptation bases that are the drivers of the urge to connect and reap the benefits of such behaviour.

A better understanding of the deeper connections humans share with nonhumans can lead to greater preparedness to accept the human-centricity of current thinking about how we live with, and act on behalf of, nonhumans, in general and in particular. This is especially so for those whom we share our daily lives, and who have no other option but to rely on we humans for their very existence and safety. Tess (Divided Loyalties/Disaster Dilemma [DL/DD], page 163) perceptively recognised and expressed this notion.

There were several sections within this chapter which, while all being facets of connectedness, described particular aspects as they presented in the accounts. A significant portion of the participants declared their animals/companion animals as family. Charles (2014:716) puts the figure of Australians declaring their nonhuman animals as family at 88%. This is one aspect of connectedness which *should* be of significance to disaster planning and management and policy makers. The implications are that future disaster policy and management will better serve the broader community if an *all-of-family* approach is adopted. There are, without doubt, practicalities and complications that need to be overcome. Nonetheless, it is becoming increasingly obvious that people want/expect their nonhuman family members to be included in rescues and after-disaster services and many times need help beyond their own capabilities of providing. The mindset linked with the current dominant paradigm of human-centrism, however, is a key underlying obstruction to this. Recognising and questioning how the human/nature binary has become embedded in thought and action can lead to ways of destabilising this binary and the

power imbalance that it establishes. McCarty (2016:Loc 135) states, '[f]or Derrida, the binary opposition always contains more than it lets on, always represses a certain key difference, precisely by the way of exclusion'. More will be written on this concept in the next chapter in context of *disconnections* (of humans from the nonhuman world, and nonhuman animals in particular).

Person/s In Care (PICs) can be presented with moral dilemmas during disasters that they would not normally be confronted with, due to the choices they are forced to make regarding the lives and safety of their nonhumans. Incongruously, perhaps, stronger bond between a person and their animal can mean a more traumatic experience for both. Given the now greater acceptance of companion animals, at least, as kin, dilemmas of choice are more likely to present themselves at these traumatic times, thereby intensifying the distress (for the PICS and their animals). It is this same deep connection that people have with their nonhuman kin that leads them to defy regulations devised under the current model based on human exclusivity. Because of this, people will continue to place themselves, their nonhumans and rescue personnel in jeopardy because there are not sufficient formally planned options open to them that reasonably and consistently include their nonhumans.

The manner in which some people will prioritise their nonhumans' lives (oft times at the cost of their own comfort), risk their lives to rescue nonhumans (even ones that they have no personal relationship with), cooperate with other people on behalf of nonhumans (again, often unknown to them) or even express profound emotional reactions to the plight of nonhumans caught up in disasters speaks greatly to the deeper connections humans have with nonhuman animals: deep connections that may not even be overtly acknowledged until the confronting times of disaster event can lay them bare.

The next chapter (7/Theme 3) offers further discussion on the phenomenon of a socioculturally embedded sense of disconnection and explores the evidence for its existence within the participants' statements.

7. THEME 3 – DISCONNECTIONS (THE TIES THAT BLIND)

Tis by the same vanity of imagination that [man] equals himself to God, attributes to himself divine qualities, and withdraws and separates himself from the crowd of other creatures. (Michel de Montaigne [1533-1592], cited in Marshall, 1994[115])

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I cannot share the opinion of Montaigne and others who attribute understanding or thought to animals. I am not worried that people say that men have an absolute empire over all the other animals…I know that animals do many things better than we do, but this does not surprise me. It can even be used to prove they act naturally and mechanically, like a clock which tells the time better than our judgment does… (René Descartes, From the Letter to the Marquess of Newcastle, 23 November, 1646, cited in Kalof, 2007[116])

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Disconnected from nature

I need to escape …

(**Text has been removed due to copyright restrictions**)

… or is it just me?[117] (Author Unknown, c2014)

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As has been mentioned at certain points throughout this thesis, there have been particular influences in Western understandings and assumptions that have led to the entrenchment of the *dominant* paradigm of a human/nature, human/animal dichotomy which has resulted in a more embedded sense of a disconnect between

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[115] Marshall P, 1994, *Nature's Web: Rethinking Our Place on Earth,* Paragon House, New York, pg.198
[116] Kalof L, 2007, René Descartes: from the Letters of 1646 and 1649, *The Animals Reader: The Essential Classic and Contemporary Readings*, Eds. Kalof, Linda and Fitzgerald, Amy, Chapter 9, Berg, Oxford
[117] Author Unknown, c2014, available on line 22nd August 2017, https://allpoetry.com/poem/11477563-Disconnected-from-nature.-by-Unknown-Author

humans and the nonhuman world. Such a sense of disconnect has been reinforced by population growth and the increasing urbanisation of human societies and less opportunity to have direct contact with nonhuman animals other than companion animals, 'unnatural' zoo experiences, and, occasionally, the few species that have adapted to urban environments. Writing from an environmental philosophical perspective, Mathews (2007:20-21) describes 'the processes of urbanization and industrialization that have been synonymous with the disenchantment and tragic devastation of the non-human world': greater mechanisation of the 'human world', greater centralisation of urban populations and increasing isolation from the 'natural world' have led to a greater sense of disconnect with it.

Section 2.3, page 20, provided an overview the key influences leading to this dominant paradigm: the grounding of the Western philosophic tradition in Classic thought; the indoctrination of religious dogma; and the influence of early science, particularly Enlightenment scientific philosophy. This chapter extends the discussion begun there and in doing so fulfils Aim 3 of this project (to investigate how participants' responses might reveal a sense of human disconnectedness from the nonhuman world).

On the problem of ideology and entrenchment, Stuart Hall (cited in Morly and Chen, 2005:26) writes, "'[t]he problem of ideology… concerns the ways in which ideas of different kinds grip the minds of masses, and thereby become a 'material force'"[118]. The dominant paradigm (above) is a driving 'material force' which has gathered momentum over the ages but is perhaps now beginning to lose its strength as more rise to challenge its validity. Certainly there have been those over the course of Western socio-cultural development who have seriously questioned the hegemony and the concomitant entrenching of taken-for-granted assumptions of human superiority. Marshall (1996) traces a number of thinkers, including those of the Classical era, onward, who spurned the idea of cruelty to nonhuman animals: Ovid (born 43 BC), in *Metamorphoses*, argued that animals had a right to live (pg. 80); Porphyry (born 233 AD), who Marshall claims as 'one of the earliest and most

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[118] Nearly five hundred years earlier, de Montaigne (2016: Loc 13633), expressed a very similar sentiment, a 'doctrine seriously digested is one thing, and those superficial impressions another: which springing from the disorder of an unhinged understanding, float at random and great uncertainty in the fancy' (De Montaigne, M, 2016, *The Complete Works of Michel De Montaigne*, Delphi Classics, Hastings, East Sussex)

eloquent defenders of animal rights' (pg. 87); Rousseau (1712-78), a critic of the scientific reasoning which likened the natural world to a system of mechanics (pg. 239); Jeremy Bentham (1748-1832), who extended rights beyond humans and claimed there was 'no insuperable line between men and animals' (pg. 231); English poet, William Blake, who wrote of fellowship with a fly in the poem *The Fly* (1794), 'Am not I a fly like thee? Or art not thou a man like me?' (pg. 251), and, *inter alia* (and *deinceps tempore),* Singer on *animal liberation* starting in the 1970s (pg. 432); Tom Regan on *animal rights* (1988) (pg. 433) and ecofeminists, Caroline Merchant (pg. 409) and Ursula Le Guin (pg. 411).

Michel de Montaigne, Marshall (1996:198) states,

> …was one of the first since Roman times to argue that cruelty to animals is wrong in itself and not merely because it encourages cruelty in humans. Indeed, by breaking with the prevailing anthropocentric tradition, he helped start the great revolution in Western thought which has challenged the Scholastic dogma that the world exists for man alone.

Certainly, de Montaigne stated his case against the hubris of human thought about our perceived superiority above all other beings most articulately and derisively. The quotation from him, above (page 196), is a small section taken from the essay, *Apology for Raimond Sebond* [c1580], (2016:Loc 13768) in which he mocks the arrogance of 'man':

> Presumption is our natural and original disease. The most wretched and frail of all creatures is man, and withal the proudest. He feels and sees himself lodged here in the dirt and filth of the world, nailed and rivetted to the worst and deadest part of the universe, in the lowest story of the house, the most remote from the heavenly arch, with animals of the worst condition of the three; and yet in his imagination will be placing himself above the circle of the moon, and bringing the heavens under his feet…..How does he know, by the strength of his understanding, the secret and internal motions of animals? – from what comparison betwixt them and us does he conclude the stupidity he attributes to them?

However, while these thinkers have most certainly been influential in providing alternative ways of understanding human relationships with nonhuman nature/animals, the dominant paradigm of a $\frac{Human}{Nature}$ separation still widely prevails, until it becomes destabilised enough to be replaced fully by a more holistic, inclusive view of the world and all beings in it and this, then, becomes the dominant one.

One particular modern thinker has provided key insights into means with which to destabilise the dominant paradigm. Continental philosopher, Jacques Derrida (1930-

2004), is widely thought of as the 'father' of *Deconstruction* (Glendinning, 2011:1), the strategy for critically questioning assumptions bound up in texts (of any form, literary or otherwise).Within this taking apart of texts, more generally, Calarco (2008:103-149) points out that Derrida pays considerable attention to the '*question of the animal*' and to the anthropocentricity of 'philosophy and associated discourses' (pg. 104) and that he (Derrida) was 'highly suspicious of classical formulations of the human-animal distinction and [sought] to rethink differences between human beings and animals in a nonhierarchical and nonbinary way (pg. 105).'

Calarco (2008:108) describes what he considers to be Derrida's three key tasks when contemplating 'the question of the animal':

> …(1) A kind of "proto-ethical" imperative that gives rise to (2) a concrete ethicopolitical position, on the one hand, and (3) a thorough reworking of the basic anthropocentric thrust of the Western philosophical tradition, on the other hand.

It is key aspects of the third of these three tasks to which this thesis mostly references (being limited by its scope and size to be able to explore it more fully, or the other two tasks in any meaningful way). One such aspect is Derrida's notion of a *metaphysics of presence*, and is particularly relevant to this study due to the manner in which it relates to the prioritising (centring) of humans, generally, and in the particular of disaster events.

Derrida (1976:309), discussing Rousseau, writes,

> Thus the North, winter, death, imagination, representation, the irritation of desires— this entire series of supplementary significations—does not designate a natural place or fixed terms: rather a periodicity. Seasons. In the order of time, or rather like time itself, they speak the movement by which the presence of the present separates from itself, supplants itself, replaces itself by absenting itself, produces itself in self-substitution. It is this that the metaphysics of presence as self-proximity wishes to efface by giving a privileged position to a sort of absolute now, the *life* of the present, the living present.

In the context of a *metaphysics of presence* and the human/animal binary, the 'presence of the present' supplants absence and is privileged over it. In this same manner, the *presence* of 'human' renders 'animal' absent. Teasing this apart further, it could be argued that <u>no animal is present in *animal*</u> – or, in other words, no one particular animal is distinguishable in any way in *animal.* All but the human animal are hidden within this one homogeneity/homologous 'thing' – 'human' (singular term) is still suggestive of multiplicity/array/diversity, whereas 'animal' hides this

and is not suggestive of plurality (of type or totality) unless given in a particular context.

Derrida (see, for example, *The Animal That Therefore I Am,* 2002[119]) points to the manner in which humans have historically subjugated nonhumans through the application of the term 'animal', a singular group thereby including all other (than human) living beings in the one label, or category, which allows for no differentiation or dissimilitude between one animal species and another – humans are, thus, a special group of living beings only deserving of such distinction.

> The animal, what a word!
>
> The animal is a word, it is an appellation that men have instituted, a name they have given themselves the right and the authority to give to another living creature *[à l'autre vivant]* (2002: 392).

The 'containing/constraining' of all animals under the one 'label' thus dismisses the complexity of the rest of nonhuman life[120]. This works to reinforce the binary – and at the same time over-simplify it (Calarco 2008:139) – by which it has been created. One singular species is on the privileged side of this entrenched binary and all other animal species are lumped together on the opposite, non-privileged side in this traditional mode of thinking, which Derrida seeks to challenge and destabilise. Such privileging or 'present-ness' of humans marks all nonhumans as absent and less worthy. It is this entrenched, largely unchallenged/taken-for-granted assumption/ideology that, so far, continues to drive disaster policy and deprives nonhuman animals, generally, but particularly when they are at their most vulnerable (especially those with no ability to safely escape their confines). Indeed, as Calarco (2008:112) argues, while discussing contexts for comparing human suffering along with animal suffering, for the

> …abandoning [of]…the hierarchical humanist metaphysics that we have inherited from the ontotheological tradition, for it is this tradition that blocks the possibility of thinking about animals in a non∕or other∕than∕anthropocentric manner.'

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[119] Jacques Derrida, 2002, translated by David Wills, 'The Animal That Therefore I Am (More to Follow), *Critical Inquiry*, Vol 28, No 2, pp369-418

[120] Additionally, as Annie Potts (2010:297) notes, '[s]ome animals are not even considered worthy of transformation into an absent referent. Chickens, for example, rank so low in industrialized societies that we do not even try to hide the animal behind the meat: 'chicken' refers to both the bird and his or her flesh.'

While not addressing the issue of animals, Hall's (1980:57) words are being offered here as a reinforcement of the need for transformative changes in perspective and as an eloquent expression of the importance of challenging traditions of thinking – as Derrida desires to encourage.

> In serious, critical intellectual work, there are no 'absolute beginnings' and few un-broken continuities…What is important are the significant *breaks* – where old lines of thought are disrupted, older constellations displaced, and elements, old and new, are regrouped around a different set of premises and themes. Changes in a problematic do significantly transform the nature of the questions asked, the forms in which they are proposed, and the manner in which they can be adequately answered... It is because of this complex articulation between thinking and historical reality, reflected in the social categories of thought, and the continuous dialectic between 'knowledge' and 'power', that the breaks are worth recording.

All the following extracts are insights into aspects of human disconnection from nonhuman animals. Humans First/Pragmatism (HF/P) – a particular aspect of dualistic attitudes – more specifically relates to the inclusion or not of animals in evacuation – manifest in policies and management as an 'us' or 'them' (self/other) mentality, and a facet of disconnection. Shooters Experiences and Values (SEV) and taking of Animal Life (TOAL) are more axiomatic/ perceptible/traceable instances of dualism, whereas Silent Dualism (SD) is a more veiled /oblique dualism. Unique to the hunters (in SEV) who took place in this study, this code encompasses their experiences as well as the personal valuing of non-human life their comments expose. They reveal themselves to be among the most dualistic, in regard to how non-human life is valued, of any of those interviewed and disclose unexpected[121] empathetic feelings toward animal suffering.

Exploring dualism offers instances of actions, attitudes, traditions, politics and opinions, which, when subjected to deeper analysis can reveal the dichotomous relationships humans have with the rest of the natural world, particularly fellow animal beings. Understanding/ recognising this often deeply buried aspect of human quiddity and its constructed-ness allows for re-examinations of how we approach/construct solutions to social/environmental problems in general, and disaster mitigation, prevention and recovery issues in particular, in ways that will be more all-inclusive. This particular code, while it may seem a little esoteric, is one of fundamental importance and its consequences for (it could even be acknowledged

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[121] This was 'unexpected' by myself and, as such, speaks of my personal prejudgment and assumptions.

that it is a driver of) all decisions and policy making should never be underestimated or overlooked.

In context of the binary oppositional pairing biophilia/biophobia and Derrida's (1976) notion of 'the trace', immediately biophilia was conceived of, and named – by Fromm (1973) in *The Anatomy of Human Destructiveness* as a general love of life, and by Wilson (1984) in *Biophilia*, more specifically as the love of nature – the concept of *biophobia* (one cannot be known/know-able without the other) was established. Extremes of biophobia are demonstrated in the countless daily instances of hateful acts against animals (and nature generally… AND fellow human beings, given we are an integral part of nature).

Orr (1993:415) defines biophobia as 'the culturally acquired urge to affiliate with technology, human artifacts, and solely with human interests regarding the natural world'. This includes utilitarians who adopt a solely pragmatic approach to the use of nonhumans and environmental 'Cornucopians' who hold the attitude that all of nature is abundant and solely for the taking by humans[122]. Declaring the process of the 'break' from the natural world a 'slow tectonic shift in perception and attitudes that widened throughout the late Middle Ages to the present' (pg. 417), Orr describes six ways in which humans have disconnected from nature (restated here in point format),

- discarding the belief that the world is alive and worthy of respect
- the necessity of distancing ourselves from animals who were transformed by Cartesian alchemy into mere machines
- the necessity to quiet whatever remaining sympathy we had for nature in favour of hard data that could be weighed, measured, counted, and counted on to make a profit
- the need for reason to join power, cash and knowledge in order to transform the world into more useful forms (Francis Bacon [and his inductive/empiricism] provided the logic, government-funded research did the rest)

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[122] For more insight into this, see, for example, Schulz, Shriver *et al*, 2004, 'Implicit connections with nature', *Journal of Environmental Psychology*, 24, pp31-42.

- the need for a philosophy of improvement and found in the ideology of perpetual economic growth, now the central mission of governments everywhere
- it required the sophisticated cultivation of dissatisfaction which could be converted into mass consumption (and the growth of the advertising industry and the impetus for annual style changes) (pp.417-418)

Orr (1993) argues that despite whatever genetic 'programming' for an affinity/connection with nature there might have been, such an affinity is now something which must be consciously chosen – that modern science and technology combined with our urge to dominate and control nature has led to a world in which it is now easier to become biophobic. Yet, as he declares (pg. 420), '[b]iophobia is not OK because it is the foundation for a politics of domination and exploitation.' In a similar vein, Zaki (2011 on line) reports on research indicating the trend for a decline in empathy, with growing social isolation being suspected as a key driver. If social isolation does, indeed, play a causal role this would be another example of sociocultural influence over/transforming inherent behaviours – in a similar manner to the key sociocultural influences which have led to a sense of disconnect from nature/nonhuman animals. Within the participants' words below can be seen evidence of the above influences that Orr argues have led to attitudes of disconnection from, and dominance over, nonhuman animals.

7.1 Codes and Extracts

Humans First/Pragmatism (HF/P)

When a disaster strikes, who should enter the ark? It is widely understood that human lives have priority. (Irvine 2009:1)

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The culturally instilled/programmed embedded-ness of acceptance of the priority of humans above all others at all times is evident in the spontaneous and natural manner of delivery in participants' responses.

Barb: *So you've got two teenagers, one an inexperienced driver, and two cats in pet packs and a man behaving like a complete lunatic, saying 'All I care about is protecting my house'…*(Ex 31)… *yes, so she* (daughter) *apparently took the cats into his family room downstairs, or ground level, where it was tiled. She said there was a lot of stuff* (said) *for about an hour then about having the cats there!*(Ex 32) … *so what she did…she actually got quite upset about this…she's quite a strong willed young woman and …she put her brother in the car…she put the cats in the car and she said 'I'm leaving'* (Ex 34)… *you can imagine how distressing this is…because this man is supposed to be as responsible for these children as I am …and he just let her drive off! Into an unknown situation! Because he didn't want to have cats in his basement!* (Ex 35) … *it was horrific when you think about that…it was just horrific…and it was about the animals…definitely about the animals…his aversion…I mean …I've always had animals…but –* (mimicking her ex-husband) *– 'I've got a nice clean house …I don't want any smelly animals in it!… shedding fur or making smelly poos or…whatever…and …even in the middle of a natural disaster, I'm going to keep it that way!' …the house matters more than anything else…* (Ex 77)

Barb's ex-husband was not only annoyed about the cats being brought to his home by his children, who were seeking shelter from a bush fire (and a particularly large and unpredictable one, at that) – he also had different priorities and expectations in the situation, namely, the protecting of his house. However, his decision making had the potential to impact adversely on the lives of his two children (who were looking to him for security) and the two cats (who were totally dependent on the decision making of the humans in whose custody they were confined). There is certainly a hierarchy of valuing apparent in this situation, but perhaps with a bit of an unexpected twist. While the cats were obviously at the bottom of the hierarchy, it appears as if this father placed the value of his house above that of his children.

Tess: *…if we would have known we would have got them to get us as well* (friends with a boat)*…but you don't hear about these things until afterwards because… you know… but… yeah… I suppose that their priority is human life… I guess* (Ex 151)

Tess's comment not only reflects the assumption that human life is a priority, and, indeed, under the current paradigm, this is the case, but it also reveals, at one level, her acceptance of the status quo …and yet… there is an intimation of her questioning of it – 'I suppose', 'I guess'…

Karen: *…I understand it actually. I think perhaps given they were schools they could have perhaps segregated off an area. I really don't know because I get it that in those confined spaces…* (Ex 282*)… like even us… just at this house with so many different dogs and that… you were always worried about this one biting that one. I get that if you are in an evacuation centre with hundreds of people and hundreds of animals… that is when kids get bitten… that's when dogs bite. It would have been too much of a mix of unknown quantities of animals…so my common-sense… I guess… sees it that way* (Ex 283)*… but then I just think too… of the logistics of not only people going to the toilet …but all these animals going to the toilet …and the effect of all the faeces …and everyone walking through it… and the disease… and later on it is a school ground …and kids are going to be playing on those grounds later on* (Ex 285)*…*

Karen offers a pragmatic justification for the evacuation spaces to be for humans only, but, in the context of other aspects of her experience, this also speaks to the dualistic discord operating within her. Karen went 'above and beyond' and toiled almost until the point of collapse on the initial day of the flooding event, rescuing not only her own horses but also those of many of her neighbours, and yet, here she makes a convincing case for evacuation centres to be for humans only.

Kalia: *…as I said, I can understand… you know …some dogs and cats panic and scratch and bite… and all that sort of thing… and you can't take 20 dogs from one house or something. If you have got one or two or whatever… that's fine… but you can't be jumping up on choppers with people's pets when you have got people to evacuate… sort of thing* (Ex 419)*… it's obviously people first and pets sort of second* (Ex 420)*… there needs to be something that your pet …you have like a reasonable number of pets… I think you can only… say… one pet per person…like …maximum; you can't be filling up choppers with pets…but if you have a pet sitting on your knee in one of these bags or something …in a chopper or a boat, it's not taking up any*

more room…(Ex 435)… but if a dog or cat or any pet is deemed to be unsafe, as in they are going to injure somebody else or injure somebody else's dog, obviously it's definitely a no…(Ex 436)

As for Karen, Kalia's comments reveal an inner struggle with the tensions between connection and disconnection that are at play. She is caught between wanting a system that will accept animals in evacuations and the pragmatism of being bound by the (unresolved but not unresolvable) practical issues that define the current model of disaster management. To her it is 'obvious' – 'obviously people first' – that humans come first, but then she tries to think around a solution whereby nonhuman animals can be included in flooding rescues.

Kim: *…I can understand why…you know… when you get to the evacuation centre… I mean… we are talking hundreds of people from all over …and you couldn't possibly have an animal there* (Ex 465)*… in* (place name) *it practically took the whole town…that was terrible… the loss of life. I guess you wouldn't …when that happens you're not worried about your animals, I suppose… you are worrying about yourself* (Ex 470)*… well I mean… I think it's a matter of life first, obviously… and…yeah… in emergency situations animals don't matter… I think that's the general consensus* (Ex 505)

Kim's comment is quite explicit about the acceptance that evacuation shelters are for humans only – 'you couldn't possibly have an animal there' – but it also reflects the broader 'consensus' that in extreme circumstances nonhuman animal lives are dispensable – 'collateral damage', if you will.

Nat: *…people were more concerned with your personal well-being than they were with your pets…but sometimes they are hand-in-hand* (Ex 650)

Nat's comment is actually insightful – the well-being of people and their 'pets' *do* go hand-in-hand (Evans 2011; Evans and Perez-y-Perez 2013).

Tessa: *…at this stage pets were the last thing on our mind…* (Ex 675)

'At this stage pets were the last thing on our mind'. This is an honest yet telling statement. It certainly seems to speak of a humans-first mind set and the lower

priority of Tessa's 'pets' at this point. Of course it would be natural to immediately react to secure human family members but if we take other beings into our *family* then shouldn't they be included at that level of priority? Is this thinking simply a product the stressful situation? In such situations of anxiety, clear thinking can elude one. While there appears to be a significant gap in the literature which specifically addresses the topic of how individuals' thought processes are impacted during a disaster event, Kowalski-Trakofler and Vaught (2003:278) address the implications of 'human judgment and decision making under stress' in the context of emergency management. Yet, if the 'pets' are considered family members it would seem that they *should* be automatically included in the *family's* evacuation effort. It is hard not to see this in the light of a humans-first mindset.

This statement is also a revealing one in another context – as indicated during the interview, Tessa worked in a veterinary clinic (or some other animal-centred business) as she referred to taking 'guinea pig cages from work'(Ex 689). For someone whose daily work-life is focussed on the well-being of animals, the statement seems to be at odds with that focus. Again, evidence of a deeply entrenched cultural conditioning, normative valuing regarding humans' place in nature could be underpinning the statement. Given, in a subsequent evacuation, Tess was better prepared with regard to her dogs and cats, it is possible that there was a certain underlying taken-for-granted-ness in her approach to the needs of her animals in the first evacuation – a certain incongruence /paradox at play in being both, a highly charged, stressful state due to the fear of the fire, yet at same time a certain sense of complacency seems to have been in place with regard to the prioritising of the her animals. As previously mentioned, the initial incident was a *focussing event* and drew Tessa's awareness more keenly to the preparation and evacuation needs of the dogs and cat the next time a decision was made to evacuate.

Tessa: *…we had two cats, two dogs and a horse. One dog was fine, one dog was just terrified and obviously traumatised… but again we didn't have a lot of time to be concerned about him* (Ex 682)

In the moment, Tessa had registered that one of her dogs was reacting badly to the circumstances but she 'compartmentalised' this observation. She knew where he was

and acted on other 'priorities', revealing a pragmatism and prioritisation and hierarchy of valuing.

Forum: *They may not have facilities to take pets given that for disaster situations, people are usually taken to school/town halls and the like. You can't really have dogs and humans all mixed in together in an indoor setting. Not all the animals may be house-trained and in any case, there's no telling how the animals will react to so many strangers in such a setting. Even if they set up another section for animals - it could be hard to have cats and dogs together, even dogs together if some of them are timid/dog aggressive etc. Unless they had kennelling facilities with crates and separate cages etc it could be very tricky and in an emergency, the priority is the humans. I don't think you can blame rescue services for focussing on humans first even if it's a heart-wrenching situation to be faced with. And for those who refuse to leave their animals behind, this might potentially be putting rescue workers/emergency personnel in jeopardy as they try to negotiate etc ... It's a really tough situation all round and I am not really sure what I could do. I might ask that we be evacuated with our dogs but say that we won't join the main group but perhaps they could drop us off somewhere else or something* [sic] *Logistically I'm not sure how that would work and I sincerely hope I'm never in that situation* (Ex 963)

This comment underscores the perception of a 'problematizing' of the dogs. However, the problem is not the dogs. The problem is that the dogs are not catered for. The argument here is in the context of how these issues are currently planned and is an argument for maintaining the status quo. What is not being questioned is *what, where* or *why* changes need to be made.

Forum: *While I understand that resources are limited and humans have to come first, I could not leave my animals behind. There would be no point in saving me if I left them behind and something happened to them as I would not be able to live with myself. It would be like someone saying to me well here's a life-raft to save yourself but you have to throw your kids overboard first. At the same time I would not expect one of my pets to take the place of a human if rescue options were limited, but I would expect rescuers to respect my wish to stay with my animals* (Ex 974)

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Forum: *Unless you have been in a true disaster then it is easy to say you are not leaving without your animals but the reality is that hundreds or maybe thousands of people HAVE TO. Having done disaster recovery one of the most heartbreaking memories I have is of an old man out at Charleville. He loved his chooks and left them in a pen with a roof thinking they would be alright. The water rose and drowned them at the top of their pen. That man was grief striken [sic]when he was able to return home and see what happened. So while my dogs are my world that man's chickens were the same to him, yet we probably wouldn't be too keen to see a crate full of chickens sharing floor space with us at an evac [sic] centre. So sorry but based on experience I can see the need to focus on people and not animals during a true disaster. I do wish there was a national animal evac [sic] org as well as I do think there is a specific need to move animals away from harm. Even cattle don't deserve to drown. But if you can get them out yourself earlier then do it. My emergency plan includes camping gear so we can set up somewhere with the dogs well outside of the danger zone* (Ex 1005)

The forum comment offered here is an unconcealed example of Humans First/Pragmatism (HF/P) (as a disconnection) – 'we probably wouldn't be too keen to see a crate full of chickens sharing floor space with us at an evac [sic] centre'[123]. But at the same time it demonstrates a clear illustration of connection – '[h]e loved his chooks'/'my dogs are my world'. The comment reveals the embedded, taken-for-granted assumption of the 'normalness' of the prioritisation of humans, and yet, also speaks of deeper connections – the man was 'grief stricken' when he returned home to find his drowned chickens.

Silent Dualism (S/DUAL)

Deconstructing the following two extracts illuminates entrenched dichotomies in operation within participants' world views – notions so taken-for-granted that they are all but invisible and go unchallenged and in the process reveal the underpinning of a metaphysics of presence and the resultant human/nonhuman binary. These codes overlap with others offered under the theme of 'Disconnection' but are presented here to demonstrate how taken-for-granted assumptions become hidden in discourse and dialogue.

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[123] Why?

Kalia: *...to them that was worth it* (to be with their dog)*...to me ... because it wasn't my dog... I thought, gee... it's old, it's blind, it's deaf, if it lasts another six months it will be a miracle..., kind of thing...so.... but no... they weren't going to leave it...they would have died with their dog rather than leave... yeah....*(Ex 440)

In this comment, Kalia, and in context of her comments in Evacuation Processes (EVACP) (page 135), Animals as Priority (AAP) (page 172) and Impact Of/On Bond (IOB) (page 186), is revealing a conflicting hierarchy of valuing of nonhuman life, which, in turn, speaks to the complexity of human-nonhuman relationships and the multifariousness of the ways of valuing nonhumans. In the previous comments she relays the efforts she went to in preparation for her horses' safety, the desperation in her effort to try and include her dogs in her air lift evacuation and her empathy for the older couple and their elderly dog. However, here she is questioning whether the old dog's life was worth the trouble that it's 'owners' were going to in order to stay with it and protect it, while at the same time as acknowledging the depth of their bond with their dog – 'they would have died with their dog rather than leave…'. On the one hand, she is declaring that the older couple's lives should have been a priority over their dog, but, on the other hand, that her horses and dogs were a priority to her – until the flood waters rose too high to allow her daughter to stay with her horses and until the dogs were refused aboard the aircraft. The result is a mess of entanglement of connection and disconnection at play – and to a large degree exacerbated by the current anthropocentrically driven evacuation policies, planning and operation, which uphold the prioritising of human life under current models.

Patrick: *During extreme days of total fire ban, we unlocked most internal paddocks to allow cattle better movement to escape any fire front threatening the property, placed pet goats in the paddock least susceptible to a fire front, let the cat out of the house (during very hot dangerous days, she often sought out a deep drainage pipe at the front of the property), and also let the chickens and geese out of their pens (giving them some chance to escape fire front). The pet fish remained in the outside ponds.* (Ex 922*)... The children helped in these endeavours* (releasing animals from enclosures on fire danger days) *and understood what we were doing to help protect pets and other animals in the case of fire, and that there was always a chance that our house and pet animals would be lost in a major bushfire* (Ex 923*)... The children*

did not worry about the animals not surviving (Ex 925)… *two adults, two children, two guinea pigs, rabbit, dog and sometimes the cat. The cat, rabbit, the guinea pigs were transported in separate cages, and the dog was placed in the hatch car* (Ex 927)

The last lines of Patrick's comment here ('the children helped…') display a very pragmatic, human-centric attitude which leads one to consider how this father is instilling the valuing of nonhumans in his children – that there is an acceptable level of inevitability that the family's nonhuman members (non-companion, at least) will be, as a matter of course, vulnerable/lost to disaster. While it might seem, to some, like a realistic approach to take to 'condition' his children to the chance of the animals' loss of life in order to reduce their ultimate distress, and he no doubt thinks he is doing the 'right' thing by them, therein lies the paradox. He is 'conditioning' his children in several ways.

 He is normalising the concept of the disposability of animals in human societies. Some would see these practical measures as giving animals 'the best chance' and that they can be seen as 'right/proper' and a reasonable socio-culturally accepted way to act on their behalf. But at a deeper level it also speaks of both, a culturally ingrained attitude of the privileging of humans and of a hierarchical valuing of animals (Kellert 1996; Irvine 2009) (within the $\frac{Human}{Nature}$ binary and within the totality 'animals'). Whilst an array of animals were chosen to live on the family's property, only certain animals were automatically included in evacuation plans Although precautions were taken regarding the opening of enclosures, et cetera, the cattle, goats, chickens, geese, and sometimes the cat, were left to fend for themselves when the family left the property on fire danger days. While not openly claiming the dogs, rabbit or the guinea pigs as family, their preferential treatment over the other animals places them higher in the 'animal' hierarchy within this family. This, in turn, normalises the hierarchical valuing of animals in the children's minds.

The saddest part of the statement, however, resides in the sentence, 'The children did not worry about the animals not surviving'. If this is actually an accurate portrayal of their feelings then it demonstrates how entrenching of values pass from one

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generation to the next and how the general worth of nonhuman life is already established in these children's minds before they even reach adulthood

WARNING: DISTURBING CONTENT IN THE NEXT TWO SECTIONS/CODES

Taking of nonhuman animal lives (TOAL)

This code (and the next, for different reasons) represents what is probably the most extreme of interactions with nonhumans during disaster events – the taking of nonhuman animal life as opposed to the rescue of it.

This particular code underscores the complexities of human connections to, and disconnection from, nonhuman nature/nonhuman animals operating within people. There is a certain irony at play here in the interplay and overlap of the experiences of the two participants who contributed to this code. Neither knew of the other's existence, then or now, but the impetus behind one's actions most likely led directly to the actions of the second.

As a young man, Tyler was living in Darwin at the time of Cyclone Tracy. In the days immediately following the cyclone those who remained were called on to help restore some functionality in what was left of the city. Tyler was assigned to a small group whose task it was to find any dogs that had been left homeless and wandering the streets. The group was responsible for 'escorting' the dogs to the rubbish dump, shooting them and disposing of their bodies there at the dump – 'I got the job of rounding up the dogs…and that was kind of tragic…and it was the first time I'd shot a gun…so…(Ex 850)'.

The rationale given by the community response team to Tyler for the killing of the dogs was apparently based on the notion that they would form packs that would become aggressive and a danger to the human community – '…but that was really sad…but you had to do it…because they were forming in packs…(Ex 854)'. Research since this time (Mech 1999; Irvine 2004b; Irvine 2006) points to this notion as being an 'urban myth' – '[c]ombined with the myths about looting and price gouging, Hurricane Charley revealed the myth of the "dangerous dog pack."'(Irvine

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2004:5). At the time of Tracy, the Darwin 'officials' deemed the most efficient and practical 'solution' to the 'dog problem' was to eliminate it – literally! Additionally, how likely would it be that this could have been occurring after such a short period of time (a matter of days)? It was more likely, at best, a mistaken justification for the taking of the unfortunate animals' lives. It is another instance of the 'problematizing' of nonhuman life grounded in false assumptions.

The consequences of this 'community service', for Tyler at least, have been long-reaching. As mentioned in Emotional Response [ER] (page 192), he still has an emotional reaction when he recalls the experience:

Tyler: *I think it's interesting …that I felt…I know it sounds really strange…but I felt worse about that than I did with the guy that…we looked after for a short time…*(Ex 852)*… but…so…yeah…that was really sad…but that didn't get to me as much as…the…shooting the dogs…* (Ex 853) *…and when we were at the dump doing 'the dogs' thing…because that's where we were shooting them…instead of carrying them and taking them to the dump…* (Ex 858*)… I'm here like this…talking about it…and I'm tearing* (crying)*……that always happens……the dogs, I think…that just …that was …that was probably the most shocking thing for me…as I said …that affected me more than the guy that died…'* (Ex 861) *…probably because…like one was …just…one was …sort of inevitable…you did your best…and there was nothing more you could do …*(Ex 862) *…and you've got taking a pet…and just because it was ….it was….inconvenient …it was …necessary…it was inconvenient…it was an inconvenience…as opposed to…well… stuff needed to be done…so ….nowhere to take them…yeah…so…*(Ex 863*)… yeah…well we…I reckon we were …we would have done maybe thirty in a day…and that was enough……*(Ex 865*)… ahh…we did a couple…just a couple of days…because others were doing the same thing…*(866) *…at the end of the second day …which I kind of feel guilty about…because I didn't think of it …soon enough…we stopped looking quite so hard…for dogs…and then we didn't see any (chuckles)…*(Ex 867)

Tyler took his 'responsibilities' seriously to begin with and it was not until the second day that it began to register that he preferred not to be so diligent about the task. By the third day it became so distasteful that he chose not to look at all.

Initially, Tyler was demonstrating a certain conditioning to conform to the general consensus/dominant values operating within the social structure in which he was immersed. When recounting the incident, Tyler became visibly upset, crying, hesitant about expressing what had happened, skirting around the issue several times. It was as if it was easier to deliver the subject matter in brief portions rather than a more confronting, concentrated dialogue about it. He was, while not declaring as such, revealing an internal 'battle' between being caught up within the dominant socio-cultural paradigm of disconnectedness from nonhuman animals ('kill-the-dogs-before-they-get-us' mentality) and his own sense of connectedness and empathic feelings for the dogs, which ultimately won out and because of which, continues to underscore the guilt he still feels over his actions.

'…and when we were at the dump doing "'the dogs' thing"…because that's where we were shooting them…instead of carrying them and taking them to the dump… …'[124] – a couple of points worthy of note arise from this brief comment. Tyler uses a euphemism – "'the dogs' thing" – to refer to his involvement in the shooting of the dogs rather than directly saying the more unpalatable alternative – that he was at the dump killing dogs. It is clear by his words, and manner, such as fidgeting and hesitating as he uttered them, that he was uncomfortable confronting the subject and was still very much affected by his complicity in the event. Another point pertains to the undignified, and very probably, terrifying, end to the lives of the 'pet' dogs. Firstly, they were rounded up and transported in an unfamiliar vehicle (stressful in itself), by humans they presumably did not know, to the dump, where they were then shot in front of each other and their bodies left in a place dedicated to human refuse.

Cole: *So really… the only experience I had with animals was our cat… because the day after the… well … on Christmas day I went to the hospital to see …I sort of got in there later in the day and…um …then I went… so I stayed there the night then the next day I went back and… I think that's when I was aware that our cat was up in the bearers under the house itself …and …um… there were stories… rumours going around …that people were just …willy, nilly …shooting pets …and …um… so in the end… all I could do was… do the same… in that… um… I didn't have any cartridges*

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[124] This comment was made in the context of telling me about his scepticism about the official numbers officially declared for the deaths due to Cyclone Tracy, given what he personally witnessed.

for my gun but… um…the next door neighbour gave me one …and …um …I shot the cat which was under the floorboards (Ex 872*)… well the thought was that there was different types of people up there and …um …the people could take it on… just as a sport… to go round and shoot pets… shoot them in a cruel way …I didn't want that to… um… occur so it's a decision I made myself… to do it myself …..*(Ex 873)… (In response to being asked if he minded talking about the incident) …*oh…*(long pause) yeah, …*(at this point Cole was becoming visibly upset)… *at the time....choices when… you know you're all going to be moved out….you can't take an animal …there's no one left there who knows them,…* (Ex 874) …(Interviewer: So no animals on flights?...)... *no… actually… that did happen* (animals on flights)... *they were under their clothes, they were smuggled out… mmm… you weren't guaranteed… yeah, … because …see at that time that was all part of the process… because we didn't know … um … where we were going to end up… because I had to go back to the hospital* (due to an injury)... *this was after I went to the airport with* (wife)*, I had to go back* ....(Ex 875) …*well, that's something I never thought of until the question came up & it's amazing to think…….*(stops to reflect)... (Ex 876)

Cole became increasingly upset when recalling the episode with the family cat. He implied that he hadn't given much thought to the situation since it happened but, now that it was being openly discussed, he became quite emotional and discreetly wiped his eyes. It was something that still deeply resonated with him despite being shelved in the recesses of his mind over the ensuing decades since it happened.

Cole: *… yes…yes … well the part that I was surprised at …was feeling about the cat there… because I hadn't really thought about that situation…but… mmm…*(Ex 878)…*so he was really a part of our family so that made it a much more difficult thing…*(Ex 879)

A sad irony resides in the fact that the cat lost its life because of the human-centric/anthropocentric solution to the 'dog problem' and because Cole did not want his cat to die in a 'cruel way'. Nonetheless, the final outcome for the cat, a 'family' member was still the same – and, as for the dogs, it had no choice in the decision regarding the cessation of its life. Again, there was/is an internal conflict occurring within Cole. He is obviously still affected to the point of tears today about having

taken his cat's life but, and paradoxically, at the time he felt compelled to do this – in what he perceived as an act of kindness – in large part due to the dominant valuing of animal life and in the context of the 'willy nilly' shootings of the community's animals. Given the huge breakdown in communications at the time of this event it is probably unlikely that Cole even knew that the 'dog shooting program' was an official directive from the 'emergency management personnel' cobbled together at the time.

Shooters experiences and values (SEV)

This category was given a separate code as it pertains to a different type of experience to those in Taking of Animal Life (TOAL) above. In TOAL the two men were not hunters, as such. In fact, Tyler had not used a gun prior to his experience, nor has he since. Cole owned a gun but was not a hunter. The participants in SEV were/are dedicated hunters. However, in the circumstances relating to this project they were not hunting *per se.*

The term *pis aller*[125] (as noted in the introduction) shooting has been coined in this project to help draw a distinction between the types of shooting that the hunters engage in when hunting and the shooting when euthanizing ailing animals in disaster circumstances; *pis aller* shooting is defined as 'last resort' shooting – when there is no practical way of saving an animal's life then the last resort is to take it's life in order to end it's suffering as quickly as possible. The term is also used to differentiate this type of shooting from *culling,* which is more concerned with a reduction in numbers of animals and also from the type of euthanizing carried out in non-disaster circumstances[126].

In the *pis aller* shootings, the animals that have been injured in the fires (or other events) are assessed by wildlife personnel to determine whether they can be saved or not, thus they are given a chance for survival and the 'last resort' is to take their lives to end their suffering if they are considered beyond further help in the circumstances.

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[125] As noted in the introduction, *pis aller* is a French term (noun) which translates as 'the last resort or the final resource' (Dictionary.com, http://www.dictionary.com/browse/pis-aller on line 22/5/2017).
[126] It is not within the scope of this project to engage in any discussion of the moral/ethical debate surrounding the euthanizing of nonhumans (or humans), more broadly.

Of all the participants contributing to this project those in the SEV category are probably among the most dualistic in the way they value non-human life. The participant's here expressed a general high regard for nonhuman life and, as will be evident below, were moved by the plight of the animals encountered in their disaster experiences, yet openly discussed their usual hunting practices[127].

Again, as above, there is a complex of connections and disconnections at play within this code. The wildlife personnel, not the hunters, were the ones in this instance who were determining which animals would be saved and which would be shot. In this capacity, they were acting in a seeming diametric opposition to their usual role of saving animals' lives – *seeming* because, under these, extreme, circumstance, they still had the animals' best interest at heart.

Both, the wildlife personnel and the hunters acted out of compassion in this instance, and yet, both coming from opposing philosophical standpoints regarding the taking of animals' lives in usual, non-disaster, circumstances. For these two groups of people, at least, the extreme conditions and scenarios which play out during times of disasters means an almost role reversal, and yet, both groups worked together with a common goal – the minimisation/cessation of suffering for the animals that they were interacting with. This situation underscores the dichotomies operating between groups of people and within individuals.

Dan: *… and that's something that a lot of people can't handle anyway… particularly those girls because they usually go out and save animals…but in this circumstance they were doing both sides of the fence …and that's a pretty hard thing to do…and I would really commend them for what they did…it was wonderful effort… really… for them…* (Ex 809)

This comment is rich with dichotomy – Dan, as a hunter is aware of, and sensitive to, the philosophical position of the wildlife personnel in their usual roles, but that in the 'circumstance' they were in they were having to deal with the dilemma of deciding who to kill rather than save. In his role as a *pis aller* shooter he is acting out of compassion to end another being's suffering.

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[127] To be fair, none of the other participants disclosed their stances on meat eating or whether they had ever taken an animal's life.

Terence: *The other thing that I required, and I'd spoken to* (name) *about this, was that I didn't want to be in the position where I had to make the decision whether an animal was to be euthanized or whether it was to be rescued* (Ex 721)*… because, no matter what decision I made, someone who is opposed to fire arms is going to say 'you've got the wolf minding the sheep' and no matter what decision I made, it was going to be wrong in someone's eyes* (Ex 722)*… so the criteria I discussed with* (name) *was… that none of the people who are participating in this …in the euthanizing should be making the decision as to which animals should be euthanized and which should be rescued. It had to be done by* (organisation name)*…* (Ex 723)

Terence, and the other members from his organisation who volunteered to assist (organisation name) at the fire grounds, had previously undertaken a specific training course in preparation for such situations as the need to euthanize animals injured as a result of natural disaster or accident. Their training requires them to shoot with the highest degree of accuracy possible in order to take an animal's life with one shot and so minimise suffering[128]. Terence offered a very pragmatic account of his experience yet expressed his admiration for the (organisation name) personnel and his concern that they not be caused any distress during the process of taking the animals' lives.

The (organisation name) personnel's first instinct and commitment is to saving animals' lives but they also have as a priority the reduction in or elimination of the suffering of animals. In such circumstances, they are torn between the two ends that, ironically, have a common outcome – the saving of a life (and the consequent elimination of suffering through healing) and the taking of a life (and the elimination of suffering achieved as a result of *pis aller* death).

Terence was well aware of perceptions by many in the general public regarding hunters and did not want any possibility of his actions being misinterpreted as being an unscrupulous opportunity to simply shoot animals. He was purposely organised to

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[128] Going any closer to the injured nonhumans could cause them to try to flee, causing further distress and could exacerbate the pain from any injuries already being suffered. Darts with tranquilizer would not be feasible for several reasons but, importantly, would need to be a precise dose according to weight. They also take time to become effective and this could distress an injured animal further (Clay K, Fiorini S, 2012, 'Common Ground: Toward balance and stewardship', *Recommendations of the Joint City of Bloomington-Monroe County Deer Task Force*, pp. 209)

be there through an alliance between his gun association and (organisation name) specifically to help put an end to animals' suffering. He was adamant that he would not undertake the task unless the agreement was reached between the two organisations prior to his arriving at the fire grounds.

Davis, also a member of Terence's organisation, expresses a similar point:

Davis: *...where an animal is injured or very sick and we're asked ...generally by* (organisation name)*… we had a moral obligation to do it because no-one else could. We were organised, we had trained people, we had the wherewithal, even though it's not a task we were in a hurry to do but it had to be done…* (Ex 778)

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Dan: *...and it was obvious that many animals would be killed or badly injured, as happens with every major bushfire and this was the biggest one we had tackled at that stage* (Ex 795)*… and I've been involved in that sort of activity now for many years ...and even though I had my own farm years ago… became involved in bushfires and the aftermath of those sorts of things… and realising how traumatic it was, we all picked up and did the best we could…*(Ex 796)*… the girls from* (organisation name)*… I think… were absolutely outstanding* (Ex 797)*… it was a different situation for us because whilst we were hunters or farmers or whatever… I think the closest they've ever been to it before was in a drought situation where you had to put stock down and that's a very traumatic thing to have to do* (Ex 798)*… it's humane of course… if they're dying of starvation and lack of water, one can do those sorts of things* (Ex 799) *… but this was even worse because these poor things have been trapped, usually in gullies or big forests, without any form of escape, and they've just got confused by the flames… either the flames or smoke inhalation…*(Ex 800) *… we saw quite a lot actually that looked… they were dead but they were in perfect condition… but they'd just died from smoke inhalation* (Ex 801 *…the inhalation of the heat is something that not many people realise… because they've been burnt internally… it looks alright outside but they've actually inhaled really high temperature air ...and it literally fries them inside internally* (Ex 802) *…I think the worst ones were the ones where they were caught out in the open… in grass*

*fires… where they got burnt around the feet and the face… the tails of kangaroos…
and deer as well* (Ex 803) *…probably the most traumatic thing I've been involved
in…*(Ex 804) *…I know, as hunters, if affected us a great deal. It certainly affected
me. I've never felt quite so affected as… I was…. surprised actually…* (Ex 818) *…So
it's put a whole new light on the way I hunt these days. It makes it more personal
and it's certainly makes you, I think, have a greater empathy for the animals
themselves* (Ex 819)

Dan's comments above and below offer some of the most – of this project's
participant contributions – profound, heartfelt, jarring, and richly revealing insights
into how complex human connections and disconnections with nonhumans can be.
As noted previously in Awareness through Adversity (ATA (page 128) and
Emotional Response (ER) (page 192), Dan told of how affected he was by his
disaster experience and how it surprised him. He went on to add:

Dan: *… so we were able to work with the girls very satisfactorily…* (Ex 806) *… but I
know they had a lot of really serious issues… I know… because they were basically
playing God…*(Ex 807) *…we each had binoculars and we'd scan the burnt-out
paddocks… and the girls would just look at an animal …and they would say yes or
no… whether it was allowed to live or not…*(Ex 808) *…and we would then mark the
animals… usually with a red cross… we would paint with a spray can…and the local
council would come and pick them up…*(Ex 811) *…that would have been traumatic
for the people who had to do that too…*(Ex 813) *… I'm trying to think of the best way
to put it…when you hunt…I only hunt for meat…that's all I do… or just …feral
animals and such….that's all I've ever done… I'm not a trophy hunter or anything
like that… I'm not into that at all* (Ex 822) *…when you look down the scope… and
you look at a roo that's been really badly burnt… you can actually see what it's
going through… and I had many of them…sort of look at you as though …"For
heaven's sake… please shoot me!"* (Ex 824) *…and that gets to you after a while* (Ex
825) *…but you understand that it's got to be done….because you also feel so sorry
for the creature because of the suffering he's gone through … * (Ex 826) *…and I think
some of the worst cases were where we hadn't come across them for a couple of
weeks after the fire… and they'd been out there suffering all that time…* (Ex 827)
…they had huge joint swellings from infections… and they couldn't walk… they

couldn't …they just stood there… because they hadn't had water or food or anything… and they were basically dead on their feet, I'd say (Ex 828) *… I know one deer we had to put down… we saw… he was about a metre from a waterhole and he just couldn't make it… and he was just… he was really in a bad way* (Ex 829) *…so they're the sort of things that I think will probably just linger forever…* (Ex 830)

'It was a different situation for us because whilst we were hunters or farmers or whatever…I think the closest they've ever been to it before was in a drought situation where you had to put stock down and that's a very traumatic thing to have to do' (Ex 798). It would be a quite common thing to believe that a person who ordinarily hunts and shoots animals would not be 'traumatised' by having to shoot animals in this situation but that is perhaps a very one-dimensional view[129]. The fact that Dan has expressed his empathy for the injured animals and his distaste for the task is a demonstration of the kind of dichotomies that are deeply embedded, within him, and within us as a culture, more generally – living habitually under the dominant paradigm and losing sense of the deeper connections which are hidden by all of the conditioning.

7.2 Sub-theme 3 Nonhumans

The following excerpts offer a small sampling of the types of consequences human actions (for example, due to behaviours toward animals during a disaster event as well as due to the nature of the spaces that animals occupy within our societies, for example, in homes, cages, paddocks, zoos, laboratories…) can mean for nonhuman animals.

Vulnerability of Animals (VOA)

The very nature of being enclosed, whether by fences, bars, walls and so forth, means that nonhuman animals have limited options to flee danger and are fully dependant on the humans that have control over their freedom.

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[129] Convery, Bailey *et al* (2005) discuss a similar point when describing the grief felt by stock owners who lost their animals in the BSE disease outbreak in Great Britain in 2000 (Convery, Bailey *et al*, 200, 'Death in the Wrong Place? Emotional Geographies of the UK 2001 Foot and Mouth Disease Epidemic', *Journal of Rural Studies,* Vol 21,1, pp99-109

Discussing the 'vulnerability paradigm', Irvine (2009:3-6), notes that the real nature of 'disaster' is the event itself coupled with other factors such as physical setting, and the resiliencies and capabilities of the involved population. Where these latter factors are subpar this then defines the vulnerability of the population and intensifies the 'disaster'. Irvine continues this argument by pointing out that the most vulnerable members of a population are those who have the most limited choices about how they are able to elude/cope with a disaster event. By extrapolation, then, nonhumans caught up in the confines of human created environments are among the most vulnerable of the most vulnerable. Those nonhumans trapped in cages, farms and paddocks will be more vulnerable than most wild animals and certainly more so than most companion animals.

Satz (2010:1), suggesting the concept of legal 'Equal Protection of Animals (EPA), notes of existing animal welfare protection, '[t]he privileged (humans in this case) protect the disadvantaged (animals) only when their interests align.' There is an inherent paradox/hypocrisy (*disaster paradox*) within current disaster management protocols: in non-disaster times, under animal welfare law, there would be legal ramifications for leaving animals to their own devices, without adequate food, water or health care yet, in times of disaster, when they are at their most vulnerable, this is disregarded and animal 'owners' are prevented from accessing their animals until they are given permission, regardless of how long this might take.

Karen: *...and I had my float there, and I got a mare and foal in it and then tried to get one of my other boys in it but he wouldn't go…I put another little one in and I said "No, just leave him on the side of the road"...that was hard…but we just had to fill the float with as much as what we could* (Ex 215) *...in the end the others that we couldn't catch or do anything … they* (other people with her) *just cut the barbed wire and said if they get out they'll go…*(Ex 223) *...we were lucky...so many other people… where we went to look at these two horses… there was a pony stud up the road and they lost them all…. I couldn't even begin to guess whether there were 30 or 40 horses further along that road that just didn't make it* (Ex 261) *...friends of ours are further out but a different river flooded… he lost his whole farm of cows* (Ex 262) *...one of the things too that they said… when you are at the river mouth just watch… they tried to keep people away… and when they dredged it no-one was*

allowed to be there because there was so much of that washing down the river… we apparently had cattle coming through the river …that had come from (place name) *which is a two-hour drive away* (Ex 263)

Kalia: *… but certainly friends lost horses or had horses that got stuck in fences and then had either drowned or had to be euthanized that sort of thing… yeah…* (Ex 430) *…so certainly a friend who had three, she found two of them but never found the third one* (Ex 431) *…and it happens a lot, and more I think with people further up the river who lived on the riverbank with cattle and pigs and so much stock just went down the river sort of thing* (Ex 432)

Kim: *…you know… a guy's got pigeons… he flies pigeons… well, he went out and he left all the doors open but they wouldn't leave and while he lost a lot of them… a lot of them drowned… but they went up high but …obviously there's not enough room for them all and… yeah… for some reason they just wouldn't leave…. there was a lot of stock lost… what do you do?* (Ex 485)

In a sense, through being trained to return to, or stay in, their cages, the pigeons have, paradoxically, been conditioned to perish in extraordinary circumstances – what would be their safe refuge in usual times becomes their tomb in a disaster event.

Lee: *…absolutely similar for your farmers and the for rural properties….we have those big rural properties here, but we also have smaller ones where people might just be running, like have goats or something like that… they are very much pets… they are domestic pets… they are not just simply an animal to have on a property to eat grass or something… those losses can be quite awful too… and what actually happens to those animals in those events is a whole another thing if they can't escape where they are* (Ex 593)

Lee's comment reflects the hierarchical valuing of animals (Kellert, 1997) – 'they are very much pets…not simply an animal to have on a property'. This is an overt expression of the higher status of 'pets' above farm animals.

Nat: *…my neighbour down the road a bit… she's down the road a bit now… but they thought… they are on half the hill and they have a high house like us …but the water came in their house… with their animals… and there were snakes up the wall trying*

to get out of the water into their house… it was just horrendous…and she had four

little puppies (Ex 671)

Similarly, Nat's remark offers another example of the hierarchical valuing of nonhuman life – the snakes were 'horrendous' and the intimation is that they are of less value than the 'little puppies'.

Animal Size (AS)

While nonhumans are already disadvantaged in evacuations, their size can disadvantage them even further. As Bianca, Nat and Tessa comment, below, smaller animals stand a greater chance of being included in evacuations. Tessa's comment makes clear that only the most conveniently sized animals were going to have any chance of being 'scooped up' and evacuated.

Bianca: *…one was a Chihuahua and one was a Chihuahua cross Silky… so they were both little dogs… one was an outside dog but was always allowed inside and the other one was an inside dog… and they* (the people that offered them temporary accommodation) *just said it was all right for them to stay inside with us* (Ex 183)

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Nat: *…and when we got out there, they said that we could take the cat but we couldn't take the dogs… other people were taking their dogs but we couldn't take ours because ours were big dogs… they were blue cattle dogs* (Ex 599) *…little dogs are fine because my two neighbours' dogs were little white Maltesey type things …and they were in little carry bags as well… and they are used to being in that all the time… so I suppose the little dogs, like a cat are fine* (Ex 644)

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Tessa: *…again… that plan* (the new plan) *didn't really include other than the animals that you could scoop up and stick in your car… that was going to be in an absolute last resort if we hadn't got out in time….that didn't eventuate…* (Ex 716)

The following forum extracts are offered here as examples of the types of opinions regarding the issue of animal size and its consequences for evacuations. However, they are all wrought from the same ontological 'framework' that informs the dominant anthropocentric paradigm that embeds [mis]understandings of human pre-eminence: in other words, there is no challenge to the status quo of human priority in all things at all times.

Forum: *Fair enough* (regarding a comment supporting authorities decision not to take large, untrained)*… dogs on helicopters if there is not time to get everyone out safely as happens with a sudden fire but these towns had many hours advance notice to evacuate them before anyone's life was anywhere near being in danger. With multiple big dogs there is the weight problem but what possible reason could there be for not letting the older lady I saw interviewed, take one little dog with her?*(Ex 972)

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Forum: *"With multiple big dogs there is the weight problem but what possible reason could there be for not letting the older lady I saw interviewed, take one little dog with her?''' …'then my question is what makes that little old ladies small dogs life more valuable than my large white dogs????' 'The moral of the story is to include your pets in your evacuation plan and at least get them out earlier rather than later…even if it means moving your pets somewhere safe and you returning…* (Ex977)

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Forum: *The little dog's life is no more valuable than that of a big dog but you pointed out that you would not let your dog's take the place of a person who's* [sic] *life was in danger. A little dog does not take the place of a person, a big dog does, weight and space wise* (Ex 980)

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Ex 1024: *I've heard stories like this too. An exhibitor here was unable to take her Dobe with her, and she saw little dogs being 'smuggled' to safety. This is why she now has chihuahuas.*

Summary

More has been offered in this section on the background of the embedding of the paradigm of a sense of disconnect of humans from the nonhuman world, and from nonhuman animals, in particular. It has been argued at the beginning of this chapter that this has not been the only way of perceiving the relationship with other, nonhuman, beings but that it became the dominant one, creating an entrenched $\frac{Human}{Nature}$ binary.

The deconstructive approach of Continental philosopher, Jacques Derrida, allows for an alternative reading of texts/discourse whereby the dualisms established by anthropocentric convention in Western philosophy can be challenged and destabilised – and in the process offering a means to erase the power differential so bound up in traditional (hubristic) modes of thinking about human-nonhuman relationships. While Calarco (2008, 2007) reasons that Derrida did not fully manage in his lifetime to sidestep the anthropocentric tradition, he makes clear that he believes that Derrida was/is 'the most useful and insightful thinker in the domain of questions surrounding animality' (2008:137)

Similarly Krell (2013:Loc 3654) writes,

> What does Derrida add to the already intense discussions of animal rights and animal ethics? His first contribution is to grant a face to animals: they who not only look at us but also *see* us are not to be excluded from the ethical realm…I know of no one more capable of such devastating analyses than Derrida. To read him is to be challenged and changed – even though, or precisely because, he never preaches but only shows. Much of what he shows makes life more difficult for everyone, however: …

The excerpts in this section offer insights into how this socio-culturally driven dominant paradigm, continuously reinforced and regurgitated over time, has become normalised and continues to remain at play in human discourse, dialogue and actions, assuring its attendant sense of disconnection from nonhumans unless, and until, it is replaced by a paradigm of all-inclusivity.

Numerous of the excerpts demonstrate the participants' overt and unquestioning acceptance of the status quo of a human-centricity in current disaster management strategies and policies. Only in very minor instances were there any hints of a challenge to this, as, for example, in Tess's 'I suppose…I guess' (page 204) and Nat's comment (page 206) in which she observed that a person's well-being was linked to the well-being of their 'pet'. However, overwhelmingly the participants' world views are underpinned by the dominant anthropocentric paradigm.

Comments from two particular participants were offered (silent dualism/S/DUAL) as examples of the silent/hidden embeddedness of the dominant paradigm ever in play and the complexities of human-nonhuman relationships that ensue. One of these (Kalia's, page 210) demonstrated an example of a complex dualistic 'dialogue' operating from within. For her, deeper feelings of connectedness can been seen conflicting with entrenched socio-cultural conditioned disconnectedness. The other (Patrick, page 210), provides a glimpse into how the acceptance of the status quo of the perceived inferiority, and disposability, of nonhuman animals is passed on from one generation to the next – the instilling of valuing of animals operates at multiple levels, from the intimately personal, to the group/community, to the universal, levels.

The final two groups of participants experienced possibly the most extreme of interactions with nonhumans during a disaster event of any of the participants. Again, in the first (Taking of Animal Life/TOAL), there is evidence of the conflict between connection and disconnection operating within the two participants here – a particular aspect of this type of conflict that is/has expressed itself more overtly in the lives of these two people. In the last group (Shooters' Experiences and Values/SEV), the hunters, demonstrates how deeply dualistic (and confounding, at certain levels) attitudes to nonhuman animals can be. Indeed, one of these particular participants described his disaster experience as transformative, it so deeply affected him.

Examples and comments offered in the section, Sub-theme 3 provide an indication into of the vulnerabilities of nonhumans caught up within the confines of the artificially created environments of human societies – vulnerable to physical and to value constraints. Adding to the limitations that sociocultural valuing can impose on

a nonhuman's evacuation opportunity/success, its size can further impede this. Smaller animals are more likely to be included, formally or otherwise, in disaster evacuations. Thus, even despite a strong sense of connection that might exist between a person and their nonhuman, a larger animal may still be destined to be excluded from an evacuation, their vulnerability chiefly determined according to their dimensions.

The following section (Chapter 8) will conclude this thesis. Along with the concluding statements, will be comment on the implications of this study as well as discussion on its limitations. Suggestions for further research are also offered. Appendices A/Letter of Introduction, B/Information Sheet and C/Animal Behaviour/Impact on Animals, follow the bibliography.

8. CONCLUSION

Who is more faithful to reason's call, who hears it with a keener ear…the one who
offers questions in return and tries to think through the possibility of that summons,
or the one who does not want to hear any question about the reason of reason?
(Derrida, Porter & Morris, 1983:9)

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…the old boundaries that limited liberalism to *human* freedom are breaking down
(Nash, 1989:6)

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Il nous faut écouter
L'oiseau au fond des bois (Jacques Brel, 1954[130])

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The purpose of this study was to explore how the types of dis/connections, which
humans have with nonhumans, more broadly, are evident during times of natural
disaster. Further to this was the intention of uncovering of practical issues the
participants were presented with during their disaster experiences, how these
impacted on human-nonhuman relationships at these times and how they might speak
to notions of dis/connectedness.

The initial task in the path to fulfilling the declared purpose was to provide context
(Chapter 2.1) to several relevant aspects that directly impact human-nonhuman
relationships more generally. It was important to briefly establish some insight into
the multifarious ways that humans have historically related to and used (and even
changed – as individuals and as groups – through the usage/exploitation of)
nonhumans. Section 2.2 provided further background information on several
theoretical explanations for the ways that humans feel a connection with nonhumans,
including notions of attachment/bonding, biophilia, biosynergy and empathy and

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[130] Jacques Brel, 1954, 'Il Nous Faut Regarder', *Jacques Brel and his songs/Jacques Brel et sees
chansons*, Philips Label, Executive Production, Jacques Canetti

empathic joy. Each of these concepts provide a perspective on the biological/evolutionary reasons for senses of deep, more inherent, connections with nonhumans. Contrasting with this, section 2.3 traced a course of the socio-cultural influences that have led to a sense of disconnect from the rest of nature/nonhuman animals and that have ultimately led to an embedded sense of human pre-eminence. Sections 2.4 and 2.5 offered contextual information on the types of natural disasters that occur in Australia, as well as on the numbers and key areas of confinement of (mostly non-wildlife) nonhumans, respectively.

A review of the existing literature (Chapter 3) within the field devoted to human-nonhuman (mostly companion animals) relationships during the circumstances of disaster provided insights into the complexities of disaster management and the recurring issues faced. These include logistical intricacies of disaster management along with behavioural aspects of managing Person/s In Care (PICs) and their nonhumans during traumatic times. A focus of much of the literature is on disaster management, revealing the strategies for managing humans and nonhumans as generally being treated as separate issues. Literature from the US (Heath and Linnabary 2015), New Zealand (Darroch and Adamson 2016) and Australia (Every, Due *et al* 2016) points to the common acceptance within emergency policy and management to overlook or underestimate the importance of including animals in planning policy, processes or service provision. This reflects broader values and points to the influence of the embedded, and naturalised, sense of disconnect from nonhumans.

To the largest degree in the literature and in policy, PICs are referred to as 'owners'. This serves to uphold the status quo of perceiving nonhumans as property/possessions and, as such, offers no challenge to the dominant Western paradigm of a $\frac{Human}{Nature}$ divide with its power disparity and the consequent subjugation of nonhumans generally. Indeed, even PICs in this study referred themselves as 'owners' and this is not challenged under current wording or phraseology in formal and informal sources. A change of paradigm, encouraged through the use of more holistic, inclusive language, would ultimately lead to changes in community perceptions and strategies.

Fulfilling Aim 1, Chapter 5 was an exploration of the experiential issues faced during disaster events by the participants of this study. From a functional level, their recollections draw attention to a number of practical issues commonly faced by those affected by disasters. While this section focussed on the more pragmatic aspects of disaster experiences it is still possible to observe how the dominant human-centric paradigm informs decisions, formal and informal – from current disaster management approaches to available services for PICs through to the choices and behaviours of PICs, themselves.

Many of this study's participants' experiences support key aspects of human behaviour with regard to their animals, as described in the literature. Several recounted how they defied safety regulations to return to their nonhumans or refused to evacuate without them. Others spoke of the trauma and grief at being separated from them. The consequences of a lack of coordination in disaster management and rescue, as described by Glassey (2011) were evident, particularly in flood rescue accounts, as was the preferential treatment of animals according to perceived value (Irvine 2009). Such issues are not limited to the Australian experience as they are described in international literature as well as the Australian literature.

Coalescing Bacci's (2012) *WPR* (as outlined on pg. 169) method for re-visioning social problems as they are represented to be in policy and Hall's (1980) appeal for the challenging of traditional modes of thinking (as described on pg. 201) would lead to constructive new ways of thinking about the problématique/ problem *in toto*. As such, the 'problem' of companion animals (at least) in disasters would be reframed to become one part of an *all-of-family/whole of community* management paradigm and not seen as a separate, animal management issue. Similarly, adopting a melding of Nash's (1989) and Bandura's (1991) rationales for the evolution of ethics/moral behaviour would encourage more inclusive attitudes that would move beyond customary human-centric approaches. Importantly, heeding Derrida's (2002) appeal to rethink the way we shroud all other, nonhuman, animals under the one label (animal) that disguises their individuality, and their variety, would work to destabilise the constructed human/animal binary – decentring the human and leading to the opening up of a more inclusive approach to considering the needs of life other than the human.

The extreme circumstances of disaster events reveal ways that the participants felt connected to nonhumans. Such expositions, in Chapter 6/Connections, fulfil Aim 2 of this study. This chapter offered insights into various ways that a sense of connectedness can impact significantly on the disaster experience of the participants and the decisions that they make on behalf of nonhuman beings. A number of theoretical perspectives were offered in consideration of how and why such senses of connection might be understood, drawing particularly on biological/evolutionary explanations.

One of the most commonly expressed consequences of connectedness was the declaration of 'adopted' nonhuman animals as being family members. The implication of the claiming of such a relationship comes, then, with the expectation that *all* family members deserve equal consideration in times of disaster. The dominant paradigm is, however, an impediment to the possibility of this becoming an unchallenged reality.

Some disaster dilemmas faced due to senses of deep connection would be unlikely to ever be resolved when, for example, the choice must be made between saving a human family member and a nonhuman one. Where, however, the dilemma is a result of, say, limited choices for bringing a nonhuman in an evacuation, due to planning and evacuation execution inadequacies, the dilemma would be favourably resolved or eliminated if non-anthropocentric measures were adopted by initial planning and logistics. Accommodating deep connectedness humans feel for nonhumans will often require approaches that demand escaping the locked in 'prison of thought' to which Gould (1990:27) refers.

Having traced a course for the socio-cultural construction of the dominant Western paradigm in Chapter 2, its influence was demonstrated in both, the literature (Chapter 3) and in the participants' accounts of their experiences (Chapter 7), in turn fulfilling Aim 3, to explore the concept of disconnectedness.

Dualisms entrenched in text/discourse due to anthropocentric sociocultural conditioning can be revealed by applying Derrida's deconstructive approach. Such an approach allows for the uncovering of a *metaphysics of presence* bound up within the language used in texts – in policy, management and literature. Once these

dichotomies are exposed the inherent power imbalance can be questioned and destabilised, rendering the assumed sovereignty of humans and the hegemonic thinking as specious.

Adopting key principles of a critical hermeneutic phenomenological method of inquiry allowed for a deeper examination of the participants' experiences – their retelling of them and an exploration of their understanding of their experiences – and for revelations regarding their valuing of nonhuman life. The participants' descriptions of their experiences afford the opportunity of understanding how such values are passed on laterally and longitudinally, further entrenching false dichotomies. Numerous times they demonstrate an unquestioning acceptance of a 'humans-first' mentality, upholding the status quo in doing so. There are also frequent examples of their being torn between their deeper felt connections with nonhumans and their socio-culturally instilled disconnection ideologies.

Implications

Current literature on human animal relationships in times of disaster is chiefly concerned with more pragmatic aspects – particularly in regard to human survival and resilience. And, while much is concerned with aspects of animal welfare, it still largely demonstrates the embedded 'binarism' of entrenched valuing of nonhumans as subordinate to humans and is more utilitarian in nature. As such, nonhumans' successful disaster experiences are frequently fortuitously as a consequence of successful human experiences. Attention has been paid to the manner in which nonhumans are valued (for example, Irvine 2009; Every, Due *et al* 2016) and the ramifications for their disaster experiences and inclusion, or not, in disaster planning.

However, the more conceptual aspects of human-nonhuman relationships at these times have attracted a far smaller percentage of consideration. This study represents a contribution to such an area of discussion and to the broader discipline. It is intended as a stimulus to continue the conversation about these particular types of relationships. Better understanding the more abstract drivers of people's thoughts and actions affords the opportunity of formulating more comprehensive solutions to issues which extend from them. An end goal of such consideration is the hope to create more inclusive societies that automatically embrace all members of it, human

and nonhuman. Such an end goal links with the central thesis on which this study was based: *During the conditions of the extreme and atypical times of disaster events the ways humans are both connected to, and disconnected from, nonhumans can be revealed and be challenged. This knowledge is sought for the broader purpose of contributing to better understanding, and improvement, of our relationships with nonhuman animals, more generally, as well as in times of natural disaster.*

The current study offers an alternate vision for living with other, nonhuman, beings. If we are to seriously and fundamentally change the anthropocentric rhetoric that currently dominates – not only formal literature, but everyday language and behaviour as well – and that sees nonhuman life always considered as secondary (in all aspects of life and particularly at times of disaster) we must challenge traditional valuing and conventional customs of expressing it.

From a more pragmatic perspective, a key implication is suggested. Given the trend to now regard nonhumans (particularly, companion animals) as family, the consequences for policy and planning are significant. This movement toward more mixed species households/families calls for an all-of-family/all-of-community approach in policy development and in disaster management and services.

Limitations

This project has added to current understandings of human-nonhuman relationships during times of disaster. There are, though, some limitations. The findings are based on a small sample size, only eighteen participants in total and, therefore, may not be comprehensive. However, it should be noted that the aim of this thesis was for depth of insight, not breadth – that is, to collect data that allowed for a deeper understanding of human senses of dis/connection from nonhuman animals, particularly at these times. There were limited numbers of respondents who had experienced fires and there were limited types of human-nonhuman relationships within the participant sampling. The project was not specifically about Person/s In Care (PICs) and companion animals, but more broadly about exploring people's connections and disconnections as they are exposed under situations of natural disasters. Many of the participants were PICs of companion animals and a more

wide-ranging sampling of the general population might offer a different perspective or might underscore what has been found here.

The approach taken in this project, while exploring what is a very fundamental aspect of human-nonhuman relationships, is only a facet of a much larger field of study. The study is interpretive and, as such is open to alternate elucidations of the data as well as the potential for a personal evolution in interpretation. There is also the possibility that the participant's own perceptions of their experiences might be subject to change over time.

Suggestions for future research

A study which applies Bacchi's (2012) 'What's the Problem Represented to be?' (*WPR*) approach to disaster management policy has the potential to uncover biases and specious assumptions within it and would lead to a reframing of perceived problems of nonhumans in disaster, and would, in turn, contribute to a change in paradigm about nonhumans, generally.

The anecdotal information on animal behaviour included in Appendix C might possibly be utilised by an animal behaviourist as a starting point for a project devoted to the physical and emotional impacts of disasters on nonhumans. Similarly, each of the three themes holds the possibility of being expanded into three separate full-length studies.

Currently, there is no provision for collecting data on nonhuman statistics in the Australian Government's Census program. Such data could provide information on nonhuman numbers, types, locations and densities in a central database and would be useful for disaster planning and management. Similarly a geographic information system (GIS) project could be developed to draw spatial distribution maps of nonhumans. Edmonds and Cutter (2008) stress the value in knowing numbers and types for emergency planning in order to ensure adequate resources are available when needed.

There is a possible case for a feasibility study to ascertain the potential for developing a '(Doggy) Day Care Disaster Scheme' with a reimbursement system. This could potentially provide a more affordable alternative to more permanent

boarding. It would provide somewhere safe to leave nonhuman family members and allow PICs peace of mind while clean-up is being carried out during the day. It would still allow PICs and their nonhumans to maintain continuity of their relationship after hours during at a time of upheaval when it could be mutually reassuring for both.

Heath *et al* (2001a) suggest a number of practical measures aimed at strengthening the human-nonhuman bond which, in turn, increases likelihood of evacuation success for both. These practical measures could be enhanced through instilling an increased awareness of the more profound aspects of human-nonhuman relationships, more generally. An education program, combining the practical and the abstract perspectives, could be made available to PICs as well as policy makers and planners.

The three quotations offered at the start of this chapter each represent a challenge: the first to how we think, the second to how we act and the third to how we feel. Embedded senses of disconnection work to isolate humans from the rest of nature in ways that foster, if not contempt for it, then at least lack of full consideration for it. Ultimately, it is the hope that this thesis will contribute to greater recognition that disconnection harms us *all*, human and nonhuman animals alike; the hope that there will be recognition that the state of disconnection can be transformed with effort. In a world where disconnection is the dominant paradigm, in so many ways, more than ever 'we must listen to the bird deep in the woods' (Brel, third quotation above) and remind ourselves that we are *all* connected.

APPENDIX A LETTER OF INTRODUCTION

Associate Professor Nik Taylor

College of Humanities, Arts and Social Sciences

Social Worlds/Social Sciences
Level 3 Social Sciences South
Social Sciences Road, Bedford Park SA 5042

GPO Box 2100
Adelaide South Australia 5001

Tel: 08 8201 2491
Fax: 08 8201 3350
Nik.taylor@flinders.edu.au

LETTER OF INTRODUCTION

Dear Sir/Madam

This letter is to introduce Diàn Fowles who is a PhD student in the College of Humanities, Arts and Social Sciences at Flinders University.

She is undertaking research leading to the production of a thesis or other publications on the subject of *Human-Nonhuman Animal Connectedness in Times of Disaster.*

Diàn would be most grateful if you would volunteer to assist in this project, by granting an interview which would cover certain aspects of this topic. This interview may take place by email, telephone or Skype video call. When you have contacted her, following reading her request for participants, you will be free to choose and advise her of which mode of communication you would prefer to be interviewed by. She will supply you with a more detailed information sheet about her project and a consent form which would need to be signed before the interview was conducted.

The choice of interview method will be yours based on what access to communications you have. For example, you may not have access to Skype and might prefer to continue using emails to communicate or you may prefer to talk on the phone. Any involvement in the study will be voluntary, anonymous and confidential. In certain circumstances it may be possible to arrange an in person interview. If an in person interview occurs, Diàn will produce her student card, which

carries a photograph, as proof of identity. No more than 45 minutes on one occasion would be required for the interviews.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since Diàn intends to make a tape recording of the interview, she will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed and the recording will not be made available to any other person. It may be necessary to make the recording available to secretarial assistants for transcription, in which case you may be assured that such persons will be advised of the requirement that your name or identity will not be revealed and that the confidentiality of the material is respected and maintained.

As noted previously, your participation is voluntary and you are free to withdraw from the study at any time without effect or consequences. A consent form accompanies this letter of introduction. If you agree to participate please read and sign the form and send it back to me, addressed as follows:
Associate Professor Nik Taylor
College of Humanities, Arts and Social Sciences
GPO Box 2100
Flinders University
Adelaide SA 5001

If you wish, rather than returning the consent form by post, you may choose to print it, sign it, scan it and email it to me via the email address listed just below.

Any queries you may have concerning this project should be directed to me at the address given above or by telephone on 8201 2491, fax 8201 3350 or e-mail

animaldisasterstudy@flinders.edu.au.

Thank you for your attention and assistance

Yours sincerely

Associate Professor Nik Taylor

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee [Project No. 6018]. For more information regarding ethical approval of the project the Secretary of the Committee can be contacted by telephone on 8201 5962, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

APPENDIX B INFORMATION SHEET

Ms Diàn D Fowles

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Social Sciences Road, Bedford Park SA 5042

GPO Box 2100

Adelaide SA 5001

Dian.fowles@flinders.edu.au

INFORMATION SHEET

Title: 'Human-Nonhuman Animal Connectedness in Times of Disaster'

Investigator:

Ms Diàn D Fowles

Sociology Department

Flinders University

Email: animaldisasterstudy@flinders.edu.au

Description of the study:

This study is part of the project entitled *Human-Nonhuman Animal Connectedness in Times of Disaster.* This project will investigate the way in which human-nonhuman relationships are impacted during times of natural disaster. This project is supported by Flinders University Sociology Department.

Purpose of the study:

This project aims to find out about the experiences of pet owners during times of evacuation due to natural disasters in order:

- To give pet owners the opportunity to share their experiences and have their voices heard

- To more fully understand the experience of pet owners

- To identify key issues of emergency evacuations that are of most concern to pet owners

- To give those people involved in animal rescue or services to animal owners during and after a disaster event the opportunity to share their experiences and have their voices heard

- To more fully understand the experiences of those people involved in animal rescues or services to animal owners at times of disasters

What will I be asked to do?

You are invited to take part in an interview to discuss your experiences. After indicating your interest in taking part in the study, via the return email address provided on the web site on which you first read about the project, you will then be provided with a separate, and private, email address. Here you will be free to choose whether you would prefer to be interviewed via several modes: telephone, email, Skype video call or, under special circumstances, face to face at a negotiated time and place. The choice of interview method will be yours based on what access to communications you have. For example, you may not have access to Skype and might prefer to continue using emails to communicate or you may prefer to talk on the phone. If you have learned of the project through taking part in an on-line forum be assured that no part of your interview will be placed on the forum thread. However, comments that you make on the forum thread itself will be viewed by others using the thread. Any involvement in the study will be voluntary, anonymous and confidential.

 The interview will take about 30-45 minutes. The interview will be recorded using a digital voice recorder in the case of telephone, Skype or face to face interviews. Once recorded, these interviews will be transcribed (typed-up) and stored as a computer file and then destroyed once the results have been finalised. In the case of emails, the body/text of the email will be copied and stored in a computer file without the identifying information. The original emails will be deleted. Your participation in the interview is voluntary

What benefit will I gain from being involved in this study?

Sharing your experience will provide valuable information that will have the potential to improve future emergency evacuation policy and planning and reduce the trauma of the experiences of future emergency evacuees and their pets.

Will I be identifiable by being involved in this study?

We do not need your name and you will remain anonymous. Once the interview has been transcribed and saved as a file without identifying information, the voice file will be destroyed. Once an email has been saved without identifying information it will be deleted. The de-identified files will be stored on a password protected computer that only my supervisor (Dr Nik Taylor) will have access to. It will not be possible to link your comments to you.

Are there any risks or discomforts if I am involved?

The investigator anticipates few risks from your involvement in this study. However, if you have any concerns regarding anticipated or actual emotional discomfort due to revisiting your experiences, please raise them with the investigator.
Free, accredited counselling services are available should you feel you might need to speak to someone regarding any emotional issues that may arise. Lifeline offer a free 24 hour telephone support system and can be contacted on 13 11 14. Beyond Blue have an information line, 1300 22 4636, and a website, www.beyondblue.org.au , for information and national support services and links. It will be up to your discretion as to whether you contact these agencies or not.

How do I agree to participate?

Participation is voluntary. You are free to withdraw from the study at any time without effect or consequences. A consent form accompanies this information sheet. If you agree to participate please read and sign the form and send it back to me, via my supervisor:
Associate Professor Nik Taylor

College of Humanities, Arts and Social Sciences

GPO Box 2100

Flinders University

Adelaide SA 5001

Email: animaldisasterstudy@flinders.edu.au

How will I receive feedback?

Outcomes from the project will be summarised and given to you by the investigator if you would like to see them.

Thank you for taking the time to read this information sheet and we hope that you will accept our invitation to be involved.

APPENDIX C ANIMAL BEHAVIOUR/IMPACTS ON ANIMALS (AB/IOA)

The extracts offered in this appendix are comments by the participants with regard to the effects that the disaster experience had on their nonhumans' physical health and/or behaviour. They are provided here with the thought that they may inspire further, broader, investigation into the impacts of disasters on nonhumans and the predicaments that they can face and/or study on animal behaviour during such times. Some of the horrendous effects of fire on wild life were addressed in the section 'Shooters experiences and values' (SEV), Chapter 7.

Excel #	Participant	Extract
88	Tess	I got her (the horse) and walked down… and she was very good…I was a bit antsy because there were things swimming and spiders and stuff (in the flood waters)…it was all the jump poles (floating)…but they were very good… they seemed to know. Normally if you try to do that they'd say "bugger off" but they seemed to know…
105		The horses… he said… the horses were safe. They found them. They were just on the road in front of the house, eating sugar cane having a great time…a new freedom with sugar cane. The mare was lame… but that is just probably from standing in water for so long. The two dogs were fine but the pony was gone… and he said that when he first got there …that she was there when he left… and that had all been washed away… so it was a big crater now…
115		…they told me C/horse was lame but they cleaned up her foot and put ice on it…

118	They were in a paddock with about 16 horses because all these horses had to be evacuated from other agistment paddocks. I thought "This is great. We'll never get near them, with that herd of wild creatures." I called out to them and it's amazing, in a paddock of about 16 horses, two horses threw their heads up and you could see them… because they are in a strange paddock too… they both threw their heads up… and you could see they are looking around …"Where is she, our owner?"
123	They looked like crap. They were covered in mosquito bites and sandfly bites… …and you had all this stuff washed up on the property as well …and you didn't know what it was…
133	On the afternoon…I think it was the Sunday afternoon,… we were sitting out here and we could hear this noise. We have this big deck out the back and then the veranda goes almost all the way around… there's two little gaps out the front where they aren't. You could hear this noise in the railings. I thought "What the hell is that?" I went out and here's the female red cattle dog… the one that had been up on the levee for the whole duration of the flood without water or food… she's trying to jump off of the veranda… and we are talking about… I don't know how high this house is but at least 4 metres at this level even down to at least the mound… and she's trying to jump off…

I rang up the vet…I rang S up and I said to him "What do I do? We're scared. She's mental trying to leap off the veranda"…

He said she could have eaten something… she could have had something yucky that washed in and she's eaten it …and gone into an illusionary state… I suppose… yeah….

…to calm her… to stop her… to calm her down…he said it could be something she has eaten … she could be having a mental breakdown because of her experience….

…all sorts of yucky things,…I'm sure that they could have found in the yard… or it could have been just a panic attack. We still had the river going… do you know what I mean? They (the dogs) still had some issues with the river re-rising and stuff. So… who knows ...

| 138 | It is very strange and actually to be honest with you… for the rest of it… if you think about it… even yesterday when I came home yesterday she was out. That's really only started… because she did do a little bit of the staking… the sniff around outside… but now… if we go away… as soon as we are gone she's out of here. She is not just out of here, now she's up the road. She never used to do that. She might have gone out to go for a swim or something, but now she gets out and when you come home… whether it's that she feels guilty… I even said to my oldest son yesterday when I came home… I think she's gone a bit crazy… I don't |

		know. It might just be old age or something…
142		…that's why I'm wondering with the other one… that's why when we go away now she takes off…but, anyway…
		…especially after that big separation… where you are trapped on a levee bank surrounded with water… with no proper water to drink and no food… for her… for a couple of days. It can't have been pleasant…
166	Bianca	Then we went and…I think maybe four or five days after the flood …we went and got a friend's horse… two of them out from her place. She (daughter) put them up on the levee bank and she had three of them….she had her two and the friend's pony… and then we went to find them because she put them up on the levee bank… and two of them survived. The other one washed away.
		…and when we went to go get the two horses… they were just out the front of her place walking through all the mud and the sand and stuff… and they were very tired and they weren't really stressed but just didn't have food or water or anything…
195		…yeah…both our dogs are quite, I wouldn't say dominant but they are protective… and if any other new dogs come near them they will bark and growl and that sort of thing. Where we stayed there were a few other dogs and they all of a sudden wouldn't leave our side. They completely changed, they

		weren't aggressive or anything at all. They would not leave us. I guess a bit of nerves… they didn't know where they were… they were scared… that sort of thing and…yeah… we couldn't go anywhere without them…
196		The cat… it sounds sad but we were kind of forgetting about her a bit…because she was stuck in her box the whole time and we knew she wasn't going anywhere so we didn't have to constantly look over our shoulder to see if she was still there. She was very scared even when she was in that house …when she didn't come out of the box except to use the litter tray or to have a drink or something to eat. She's back to normal now. She goes outside fine, comes back in all that… but we just didn't hear much of her while we were there… … (the horses). .. they were all a bit wary of being in a new paddock… but no different to when you'd sell a horse… or it being a new horse kind of thing… it's that initial new paddock-type thing…
222	Karen	…she (friend) led one (horse)… I led one… and then another one followed us who is dependent on the one I led. He's blind in one eye, his hips are gone and he just followed us like a dog the whole way. They just knew. The ones we got out, they just came…
225		…obviously the further north you went the flood wasn't there.... so we were able to at least to get feed for the horses. They were all very sore from walking that distance and having been in water for a day in the paddock…
227		…there was… oh gosh… probably eight dogs as well. My two, being little, we kept them on a lead

so we could at least snatch them up if the big dogs were coming…going to attack them…but for the most part… all of the other dogs may have been aggressive any other time but they seemed to know….

230   …and then the next morning we went and got (name)'s two horses she'd left at that paddock,… so all our horses could be together…they were all used to being together at least because they had all come from the one place…

…but found her two horses thinking that (name) could ride them out, but she couldn't. They were way too sore… because they had been in the sun and rain and everything for so long…

…she led them so far and I actually went and got my float… and then we floated them to the paddock with the rest of all our horses. They all walked over. They were just the same thing… spent.

242   ….and they were just… they'd race over like crazy to get their food…they'd normally have walked up to us… but this time they'd all canter over… or trot over….they were all very sore…most of them lost the hair on their legs…

…it was very strange…they all lost the hair on their legs. Some went patchy, others lost pretty much all of it. I don't know whether that was just from the mud… and mites in the mud got in the skin or what. Some of them… it went up onto their bodies…

…yeah…it didn't take too long (to recover). As soon as we were able to get back to our own paddock, we washed them all down in chlorine and bleach, to try to disinfect and kill anything that might have been there…

245

The little horse we left behind that had the cut leg… when we came back he didn't have a hair on his body. It was so sad. We all thought he was covered in mud but no, it was just his skin. It was a black colour.

…don't really know whether it was stress or the water but…as I say… all the others lost it on their legs and that… I guess…but we couldn't do much with this little boy because we couldn't get to the paddock for so long… so we didn't know. Obviously…I guess… without washing him down and that… yeah… it was probably stress with everything else… because he lost so much condition. ..he was very poor…

…it (the wound on pony's leg) was still there but it actually self-healed. Once we got all our horses back to the paddock we started feeding him as well and he actually recovered. We were very surprised that the leg recovered in the way it did, too… because you could barely tell in the end. There was a scar but that was it.

Something they did all get was a ridge on their hooves…when you change diets or something… on a horse… you get like …the ridge comes down on

their hoof. Kind of like your bumps on your fingernails that eventually grow out…this ring on every horse we had in the paddock… there was a total ring around every one of their feet …just slowly grew out down their hooves…

249		A couple of… we had one in particular …suffered one or two foot abscesses… but he's prone to that. They all had very sore, tender feet for a while… having been wet for so long… and then the sun coming out and having to be somewhere else on very hard, dry, hot ground…
251		They all stressed, as such… in that a little bit nervy at that other place. When we first came back to our paddock… for a couple of days again… of feeding and routine for them …to all sort of… not be quite so anxious when we'd get out there…
308	Brooke	…we always had a dog door so … if he needed to go outside he would tap on… he was pretty stressed as well. So, he actually went to the toilet inside a few times which was really, really unusual…
311		…yeah, so he was in there (doggy day care) every day and ...one of the staff said he … was really snappy and he's a really patient, placid dog ... loves other dogs, loves other people… but he got a bit snappy and lay down and … actually rested for the day which he's never done before. He might have been tired because he wasn't used to being in there so much but... yeah, he was stressed,

definitely…

312	I don't think he really settled down properly until just before we settled on the house we bought and we moved in. He settled in at my in-law's place… but I'd say it was probably not long before we left there that he really settled down. He's kind of a little creature of habit. He knows when things happen and he's expecting things to happen….but…he was really thrown I think by that…
313	We tried to keep (dog) out of the water…but when the flood waters first started coming up… and we didn't really think much of it… he was running around like a loon in the backyard, splashing and rolling around and having a wonderful time. He was so crazy we took footage of him on our phones… he was so funny ... you'd think 'bloody hell' when you watch it … but… he did get a really bad rash…
321	…because I know….. he doesn't have a great deal of anxiety ... like when you go to the vet's…... he's not happy … he's upset…he knew something was wrong…he knew we were stressed and he reacted. It's that exact same reaction when I went into labor… because we were stressed …. he runs around, he whimpers, he jumps up on your leg a fair bit, he picks up a toy and follows you around with it… and that's what he was doing on the day of the floods before we left…

…when we started to realise that things were bad… yeah… his behaviour changed ... |

358	Casey	…and then the pets and stuff walking around the area… so the other thing I was doing… I'm trying to keep my clients informed. So I'm putting stuff on our website, our Facebook page, our blog, everywhere… because people didn't know how to get hold of us… and then the other thing that I'm doing is… I'm writing information… things to people because I want people to be informed… how to know what signs your dog needs to go to the vet… if it has come into contact with dirty water. What you need to do if there's signs that your dog needs to go to the vet. Other things… that if your pets are suffering from anxiety and stuff from all of this… what you need to be doing for that, how to avoid this, how to make sure your areas are clean and safe and stuff like that… for your animals…because there was none of that information going out either…
373	Kalia	…anyway, we got up on the roof of the next house with the two dogs, who were calm up there and all that sort of thing…
383		…our horses actually… like from where we left them… like piecing it together from the neighbours… they actually went back to where their paddock was… but it was like a house size hole in the road. One was stronger and one wasn't. One horse is strong so it swam… it could swim across and into another street that wasn't flooded... but the other horse has got a few problems… so it actually got…apparently got washed down and kept trying to swim back…and then some people saw it and they got it to a gate and a fence and got it back where the other one was…
393		…yeah…so it hasn't been a fantastic year…and now

the horse… the horse that was the most important thing in my daughter's life… has now ended up getting a rare lung condition… and had pleura pneumonia and actually had to be euthanized three weeks ago…

…so that was why I just thought … they say that that's not connected to the floods but …it all just seems a bit bizarre to me that a previously healthy horse then comes down with this rare lung disease…

399	…that was the thing…everyone was just having barbecues and throwing out food… because you knew you were going to lose it all anyway…and the Labrador is pretty darned fat…so they weren't … I mean… they were very pleased to see us… but they weren't as traumatised as I thought…
400	…whereas the other neighbour …who tried to get her dog in a chopper… her dog was very traumatised… because it had to then stay over north and went to a house… a place that somebody had taken in… like 14 or 15 dogs or something…
426	…trying to get …the horse was lame… the horse was very sore… but we couldn't work out what was wrong with it. So trying to get vets and that sort of thing wasn't … because no-one could get anywhere. That sort of thing was difficult.
433	…and you heard stories of their horses trying to climb up the river bank… like, one horse was apparently trying to climb up into … it ended up trying to climb up where a swimming pool was… things like that. But they get sadly injured… things like… so far and wide… sort of thing…

458	Kim	…well, actually I went (after initial evacuation) probably I think three doors up to a neighbour there and… you know… had to stay there with (dog). The only problem with my dog, she is a foxy, she is an inside dog, so she is used to … I mean… I've got to admit she was pretty traumatised…
		…because after that I had to go to another town and stay with my sister for the four months …and even now she wouldn't leave my side…
		…she had been left (in initial evacuation) alone… plus all the lightning and thunder… she just freaked, you know…but all these poor dogs everywhere, on the stairwells… wherever they could find … we just had to leave them…. they were there on their own, it would be…yeah… be close to 24 hours…
480		…and that was the other thing too… I've got (dog)… because I couldn't put her down…you know… just for the dogs to have a wee…trying to get them on to a bit of dry ground… which you'd have to come down from the school, walk through water and then walk up into town and try and let them do their business…and then when we got back you couldn't even walk… it was just so much mud and slush …and there was nowhere…I'm trying to walk and hanging on with her under my arm…

481	…yeah… and she'd gotten loose up there (where the animals were left at the school) too. She had pulled that collar… I don't know how she got out… but the lead was still round the little desk that we put her on… and she was roaming around inside the school… trying to get out probably…
482	I mean… there was even a Dalmatian there… there were huge dogs tied up in there too …and some of them weren't very friendly. You've got all types, haven't you…
485	Well… he (neighbour) went out and he left all the doors open …but they (pigeons) wouldn't leave… and while he lost a lot of them… a lot of them drowned… but they went up high… but obviously there's not enough room for them all and… yeah… for some reason they just wouldn't leave…because they are homing pigeons… they were staying there. There was a lot of stock lost (drowned). What do you do?
489	…that's the hardest thing… is leaving your animals behind and knowing that anything could happen to them… …and this is dark and everything… you know…I mean…there was still people everywhere doing the same thing…I mean… it's pitch black… and then you're walking through water …and I'm thinking "Oh my God, if there are any snakes in this I'm going to die"… and you're in a bit of a panic… do you know what I mean? You're sort of feeling… "Oh shit, what do I do?"…yeah… because you can't see a thing…and trying to carry the torch and a bag

		and her (dog)… I'm thinking "Oh Christ"… Yeah… there was nothing (at the school)… like even trying to find things to put water in for them, you know…
590	Lee	One of the things that the 2011 floods were…there's is something we haven't touched on. You are talking about domestic dogs and cats… there's a whole community of animals that aren't accounted for…like the stray cats and your semi-wild dogs and things like that… …and when you have whole suburbs where properties are underwater… where you have got literally hundreds and hundreds of stray cats… something has to happen to those cats… and I can tell you now the clean-up of all that would draw very heavily on some of those officers (council employees)… and it's not anything where people switch off and they just get the job done and whatever… it's difficult scenario… …most definitely (takes its toll)…yeah… I have heard stories of people finding 20 cats in trees… thing like that… because that is where they have been washed to and so on…
601	Nat	…at that stage we'd lost our fences so the dogs were back inside or back upstairs on the veranda and we just had to leave them there because we had no choice…

616	…the dogs were being very protective and knew that something was going on… and they never left our sides. I used to allow them inside, for special occasions, but I didn't anymore…. and they were so close to the door, screen door, that they were … there was all mud everywhere all over the door sort of thing…
617	…the cat was hiding…she knew something else was going on as well but she became extremely… after the event… extremely clingier than she is… and very hyper… if that makes any sense?
618	…she was lost (as in confused) because we'd had her four weeks… and then she got shuffled into the cage…and she got taken away with all the bad smells and scary animals… and then we went to another place that had scary animals and different smells… and then we went to my sister's, which was different again. So she was … the vet said she was quite tormented … that wasn't really the right word …but she really had some sort of issue…so I had to get her treatment for that…
624	Yeah…and… see… some people couldn't take their animals because they'd already passed... because they got drowned in the event…the backyard…the water came too fast…they couldn't get the dogs or the horses… you know… whatever…anyway… that's ...
640	…so… because I was feeding her something else… well… she wasn't sick but she was sick… if that makes any sense… and we were somewhere and I had to get a litter tray… and I had to get litter and…being from a cattery… she is used to one particular type of litter stuff… and that didn't smell right so she didn't use it… she went on the mat…

and that caused issues in the household …because the cat dirtied on the mat and that stank…and then… because we had water restrictions and they said there was no water… they cut all the water because the flood had broken the pipes… so there was no town water… there was no water… you couldn't really … normally you just go and soak it in a bucket and clean it up but we couldn't do that because we had no water… except for rainwater…so we had to stick it in the bucket outside and hope to get some rainwater in it…

664	…and I was constantly worried about (cat) because she was stressed… I was stressed… and because she was making so much noise …people were trying to sleep beside me …and they couldn't sleep because she was making so much noise… but I had nowhere to put her …and all I could do was just muffle her sound with a couple of coats that I'd scrounged up…
668	…yeah…because I wanted (cat) to go to the bathroom… because I thought it was the right thing to do for her …because she had drunk all her water and everything like that… but it was hard because I knew she was about to have a cat fight… because there was four or five other cats in there…yeah...and I didn't want a sick cat …because someone else's cat could have been totally feral for all I knew. If you know what I mean?
671	L is my neighbour down the road a bit… she's down the road a bit now… but they thought… they are on half the hill… and they have a high house like us… but the water came in their house,…with their animals…and there were snakes up the wall trying to get out of the water… into their house…it was just horrendous…and she had four little puppies…

679	Tessa	…anyway getting back to the pets… in the midst of all that terror as the fire was coming… and we were obviously terrified… our oldest dog… I can remember him vomiting. I don't remember how many times, but it was significant. He was obviously terrified.
		We had two cats, two dogs and a horse. One dog was fine… one dog was just terrified and obviously traumatised… but again… we didn't have a lot of time to be concerned about him...
695		The day after …the dear old dog was still vomiting the next morning and we thought perhaps it's not terror…perhaps it's something wrong with him. We took him down to the vets' the next morning and he couldn't find anything wrong with him. He said "No, that's trauma." It was just interesting that he tapped into our terror.
		…the noise wasn't so significant for us because the bushfire was blown away from us… although we could still hear it in the distance as it moved away… but I'm sure that what terrified him was us… like us…it had to be because… yeah… so anyway…
697		…and the cats… they were just terrified from being locked in cages and just the change to their life. I don't think they were aware of the terror of the day.
698		…to do with the horse… I mean we were prepared the night before… but feed and water…he had extra water …and I made sure that there was water…

	because it was so windy and horses don't come to you in hot and windy conditions… the wind was about 110 k…I think… that day… or something like that… the waters …I left water… if you like… in areas where… he was in a centralised paddock… if you like… so that he wouldn't be near anything that worried him in terms of that. He had plenty of water…
699	I went back to him effective when the helicopters began to come in… the Albert helicopters were putting out a fire on the hill next to us …and they were using the dam water down the back of us… filling up… so they were coming up over the hill like big praying mantises… so I went down with him in the paddock at that stage… and put him on a lead and just walked around with him in the paddock to avoid any situation where I thought he might have taken off and run through a fence… because he didn't know what these things were that were coming up from over the hill at the back of us… and buzzing over him…
701	I mean… during the course of the event gates were opened… that sort of thing… except for him to get out of the property. He couldn't have got off the property but he could make his way into other areas. I mean it would just be a lucky situation, really. I just gave him as much freedom as he probably could… and took his headstall off… and the sort of things they tell you to do…make sure they don't have anything on them that could burn…
707	The only one we could not evacuate was the horse. We thought… he'll just have to cope himself. Horses… if they can gallop… they are pretty savvy with fires apparently …and they can outrun them and they can get away from them and then get back over… we also had dams on the property… so he

		could have got into a dam…
899	Nataly	Even when we were finally air lifted… rescued by the NSW Fire and Rescue team …Dolly (the dog) still did not let go… (Dolly and her humans were trapped inside their floating house, swept away in a flooding event) She was terrified and even when we had landed safely at the school she would not leave our side… Thankfully, that night at the school we were in the principal's office and Dolly would not leave us… and if one of us left she would be hysterical and did not settle until were reunited again…
906		They (staff at boarding kennels) were fantastic but Dolly was extremely stressed. She didn't eat for the first few days. No one could go near her …and water was a nightmare for her… Dolly was a mess. She wouldn't let anyone but us near her. She growled a lot at everybody… which is extremely unusual for her… and was petrified of all water for a long time… Nowadays, she is a very happy dog but gets anxious still if we are apart from her…
941	Wendy	I am a dog obedience instructor, my dogs go everywhere with me but the smoky conditions and heat were causing discomfort.

My two dogs were no problem as long as the male could see me.

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