

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:

Carter, Simon Bruce

Title:

Planning for dogs in urban environments

Date:

2016

Persistent Link:

<https://hdl.handle.net/11343/124113>

Terms and Conditions:

Terms and Conditions: Copyright in works deposited in Minerva Access is retained by the copyright owner. The work may not be altered without permission from the copyright owner. Readers may only download, print and save electronic copies of whole works for their own personal non-commercial use. Any use that exceeds these limits requires permission from the copyright owner. Attribution is essential when quoting or paraphrasing from these works.

PLANNING FOR DOGS IN URBAN ENVIRONMENTS

Simon Bruce Carter

ORCID ID 0000-0002-9512-4959

for the degree of Doctor of Philosophy

November, 2016

Faculty of Architecture, Building and Planning
The University of Melbourne

Submitted in total fulfilment of the requirements of the degree of Doctor of Philosophy

ABSTRACT

Dogs are the most common pet in Australia and increasingly occupy both social and cultural norms. There is a growing interest in more-than-human geography and my thesis extends this critical concern to the planning of urban environments as a human habitat. Contemporary literature in more-than-human geography typically and unconsciously anthropomorphises the experience of those other species and in turn accounts for other species from a human perspective. My thesis recognises this gap and endeavours to provide a critical account of planning for dogs through a lens of justice for animals. My research problem is predicated on the basis that Australian society lacks consensus on the appropriate treatment of dogs in urban environments, reflecting in local differentiation of opportunities available to dogs and yielding different outcomes of justice for dogs. My thesis accordingly examines how institutions and planners affect such freedoms through their language and actions.

My thesis comprises a similar systems case study design that examines the phenomenon of planning for dogs using the case of Melbourne, a city of four million people and the capital of the state of Victoria, Australia, through the institutional discourse of eight representative councils (local government authorities). In order to critically address the fundamental uncertainty of anthropomorphism introduced by the dependent companion relationship, I elect to examine the discourse of government institutions as a credible, consistent and comparable reflection of society. Themes and theory emerge from the data through a disciplined application of qualitative content analysis underpinning a grounded theorisation of planning for dogs in cities.

An operational framework describing justice for dogs is developed from first principles, suggesting the importance of animal management, open space planning and urban planning professions in planning for dogs. These roles demonstrate a clear ontological distinction, with the dominance of ontology shown to be exceedingly important to understanding planning for dogs. In operationalising a justice for dogs, I capture the pervasive anthropocentrism of planning which manifests in the animal management practices of councils and in how human agency is defined and exercised in the process and outcomes of planning for dogs.

Whilst my thesis is ostensibly about planning urban environments and the role of local government, it also contributes to the social sciences more broadly. My approach distinguishes from what may be typical to other more-than-human geography literature through its treatment of planning for dogs as attending to underlying considerations of justice for dogs. A natural concordance with the justice as capabilities (derived from the Capabilities Approach espoused by Sen and Nussbaum) emerges, suggesting more authentic and just outcomes for dogs than in the utilitarian anthropocentric tradition where actions are guided by the demarcation of humans from animals. My thesis is a valuable contribution to this growing body of more-than-human geography literature and advances the philosophy of planning of urban environments beyond humanity, in doing so strengthening the bonds which connect the broader social sciences.

DECLARATION

This is to certify that:

- the thesis comprises only my original work towards the PhD except where indicated in the Preface,
- due acknowledgement has been made in the text to all other material used,
- the thesis is fewer than 100 000 words in length, exclusive of tables, maps, bibliographies and appendices

Signed and dated:

.....

Mr Simon Bruce Carter
7 November 2016

PREFACE

Declaration of my own original work product

Except where clearly cited otherwise throughout the thesis, this thesis comprises wholly my own original ideas, in my own words and imagery. As would be expected, I received normal academic guidance and support from my supervisors and advisory committee as I prepared my thesis.

Publications completed or in progress which arise directly out of this work

Following completion of substantive parts of my thesis, I formulated a number of publications (one of which was co-authored with my supervisors).

The following papers arising from this body of research have been published (in order of acceptance):

- Paper 1: Carter, SB, Day, JE & Fryd, O 2015, 'Don't fence me in: Understanding local government decisions to allocate and fence public open space for dogs in Melbourne, Australia', paper presented to the 7th State of Australian Cities (SOAC) National Conference, Gold Coast, Queensland, Australia, 9-11 December.
- Paper 2: Carter, SB 2016, 'Why planning limits its concern: a case study of planning for dogs in Melbourne, Australia', *Australian Planner*, vol. 53, no. 3, pp.251-9, doi:10.1080/07293682.2016.1210658, <<http://dx.doi.org/10.1080/07293682.2016.1210658>>.
- Paper 3: Carter, SB 2016, 'Establishing a framework to understand the regulation and control of dogs in urban environments: a case study of Melbourne, Australia', *SpringerPlus*, vol. 5, no. 1190, pp.1-13, doi:10.1186/s40064-016-2843-8, <<http://dx.doi.org/10.1186/s40064-016-2843-8>>.

The following paper arising from this body of research has been accepted for publication in *Australian Planner* (to appear in a forthcoming issue):

- Paper 4: Carter, SB n.d., *How planning limits its concern: a case study of planning for dogs in Melbourne, Australia*, 13 pp.

Abstracts of these papers are in Appendix 12.

Fields of research metadata

Australian and New Zealand Standard Research Classification (ANZSRC, 2008) applying to this work:

- | | |
|--------|-------------------------------------|
| 120504 | Land use and environmental planning |
| 160403 | Social and cultural geography |
| 220303 | Environmental philosophy |

ACKNOWLEDGEMENTS

A fundamental objective of this thesis is to improve urban environments in a small but meaningful way for all dogs, both great and small. This thesis is inspired by my dog Jack and memories of Ollie, Visitor, Willie and Jake, and is a gift for all the beautiful dogs out there in the world, both present and past. My wish is that although you will never know it, that you will each gain something positive from this labour of love.

I would like to thank each and every one of my 28 participants from the Melbourne councils of Bayside, Casey, Frankston, Kingston, Knox, Port Phillip, Stonnington and Wyndham and from the State Government of Victoria's Department of the Environment and Primary Industries and the Metropolitan Planning Authority. Each participant generously gave me their time, expertise and perspective on how planning for dogs in urban environments functions in practice and why it works the way it does. I have used this information prudently and with care and dignity, hopefully respecting the spirit and intention of each individual contribution. Any and all mistakes or omissions are mine.

In terms of my academic advisors, first and foremost I would express my deep gratitude to my PhD supervisors Dr Jennifer Day and Dr Ole Fryd. Jennie and Ole supported and challenged me to always improve my work, with a unique blend of supportive yet robust discussions underpinning their effective supervision style and dynamic. Somewhere along my PhD journey, our relationship matured from one of guidance and instruction to one of mutual collegiality having developed a deep scholarly respect for one another. I will always be indebted to Jennie and Ole for their countless hours spent meeting with me at all hours of the day and night, wherever in the world they happened to be, and their responsive scholarly and emotional support in my times of need. They are the academic foundation stone upon which my PhD thesis rests.

My advisory committee was instrumental in providing crucial advice over the years. Professor Paul Hemsworth, Associate Professor Alan March and Dr David Nichols provided independent guidance and support throughout my PhD, with their thoughtful contributions at our meetings often proving pivotal in my own critical reflections of my work. In a similar way, Dr Sophie Sturup and Dr Crystal Legacy each provided support in June 2015 which helped recast and frame part of my thesis as it neared its practical completion. Professor Carolyn Whitzman provided crucial advice and guidance which helped establish my PhD study on a sound trajectory in its formative days. The tireless efforts of the ABP Research Office team (particularly Jane Trewin, Ceira Barr and Sally Jones) and Naomi Mullumby of the University Library are gratefully acknowledged.

Finally, I would like to pay tribute to the exceptional support of my family. Over the years, my partner Andrew has listened to countless conversations about my thesis and research and has critically read many long papers and chapters; without his love and his emotional support and encouragement, this thesis would most likely not have come to fruition. My parents Jennifer and Bruce, and my sister Emma have been supportive of me my entire life and I would not be the person I am today without their love and support over my life's many ups and downs. My grandmother Barb, my aunts and uncles Di, James, Judy and Barry and their families were each supportive in their own ways and always showed interest and an appreciation of what I was doing in my PhD. The support of my family was instrumental at every step of my PhD journey.

I am thankful to you all.

CONTENTS

PART I: INTRODUCTION	1
FOREWORD: Domestication of the scallop.....	2
1. INTRODUCTION	4
1.1 Dogs living in human cities.....	4
1.2 An inquiry about the urban dog.....	6
1.3 Planning for dogs in cities	9
PART II: LITERATURE REVIEW.....	13
2. DOGS AND THE COMMUNITY	14
2.1 The impact of dog ownership on human health and social relationships	14
2.2 The welfare of dogs.....	19
2.3 The nuisance of dogs.....	21
2.4 ‘Pets’ and ‘Companion animals’	27
3. FOUNDATIONS OF JUSTICE FOR DOGS.....	29
3.1 Interests and rights of animals.....	31
3.2 The special case of domesticated animals	38
3.3 Normative models of ethics.....	41
3.4 ‘Justice as fairness’: the ideas of John Rawls.....	46
3.5 ‘Justice as capabilities’: the ideas of Amartya Sen and Martha Nussbaum.....	50
3.6 Developing a justice for dogs.....	54
4. FOUNDATIONS OF PLANNING FOR DOGS.....	61
4.1 Agency, identity and the citizenship of dogs.....	62
4.2 The philosophy and practice of urban planning in Victoria	69
4.3 Urban planning for dogs.....	74
PART III: METHODOLOGY I: THEORETICAL DEVELOPMENT	83
5. METHODOLOGY	84
5.1 Case study methodology	85
5.2 Research quality guiding data and analysis considerations.....	87
5.3 Institutional data and qualitative content analysis.....	90
5.4 Grounding theory	95
6. OPERATIONALISING JUSTICE FOR DOGS.....	98
6.1 Towards a justice for dogs I: difficulties of measuring the less measurable	98
6.2 Towards a justice for dogs II: applying justice and capabilities to dogs	100
6.3 Towards a justice for dogs III: applying indicators and themes to justice for dogs	105
6.4 Towards a justice for dogs IV: a multidisciplinary planning for dogs	111
PART IV: METHODOLOGY II: IMPLEMENTATION IN A MELBOURNE CONTEXT	115
7. THE ENVIRONMENTS OF PLANNING FOR DOGS.....	116
7.1 Quantitative and spatial data describing dogs in Melbourne.....	117
7.2 Registration of dogs in Melbourne	121
7.3 Provision of public open space in Melbourne	124

8.	THE PRACTICES AND ONTOLOGIES OF PLANNING FOR DOGS	129
8.1	Practising animal management at councils.....	129
8.2	Different approaches and the ontologies of council	146
9.	SAMPLING AND METHODOLOGY IN PRACTICE.....	152
9.1	Developing the representative sample of councils	152
9.2	A theoretical framework to examine planning for dogs	158

PART V: RESULTS AND DISCUSSION: PLANNING FOR DOGS IN URBAN ENVIRONMENTS 162

10.	ANIMAL MANAGEMENT AND DOGS	163
10.1	<i>Domestic Animal Management Plans</i>	165
10.2	Regulatory challenges	176
10.3	Education challenges.....	187
10.4	From management of dogs to planning for dogs.....	197
11.	PLANNING URBAN AMENITY FOR DOGS	199
11.1	Dogs and the community.....	199
11.2	Dogs and urban amenity.....	206
12.	OPEN SPACE PLANNING FOR DOGS	215
12.1	Planning public open space for dogs	216
12.2	The decision to allocate public open space for dogs	225
12.3	The decision to fence public open space for dogs.....	240
13.	URBAN PLANNING FOR DOGS	249
13.1	How urban planning lacks concern for dogs	249
13.2	Why urban planning lacks concern for dogs	259
14.	DISCUSSION AND CONCLUSION	266
14.1	Justice and planning for dogs in urban environments	267
14.2	Philosophy of justice for dogs in the context of anthropomorphism	272
14.3	Where to from here?.....	275

PART VI: REFERENCE MATERIAL 279

15.	BIBLIOGRAPHY	280
16.	APPENDICES	302
	Appendix 1: Findings in sequential order.....	302
	Appendix 2: Recommendations in sequential order	306
	Appendix 3: List of institutional documentary sources: selected metadata	308
	Appendix 4: Details of interviews undertaken by institution.....	315
	Appendix 5: <i>Domestic Animal Management Plans</i> : references.....	316
	Appendix 6: Off-leash parks and reserves: references.....	317
	Appendix 7: Playgrounds: references	318
	Appendix 8: Dog registration fees	319
	Appendix 9: Correlation matrix of dog ownership and animal management attributes.....	320
	Appendix 10: Inferential statistics in support of commentary in Chapters 8 and 11	326
	Appendix 11: Methodology for estimating the population of dogs in Melbourne.....	330
	Appendix 12: Abstracts of publications which arise directly out of this work	334

LISTS OF TABLES AND FIGURES

Tables

Table 1: Illustrative list of critical studies of the human-animal bond (source: author).	77
Table 2: Attributes representing the drivers of dog ownership and planning (source: author, derived from literature reviewed in Chapter 2 and an examination of <i>Domestic Animal Management Plans</i> in Chapters 7 and 8).	87
Table 3: The process and outcomes of incorporating institutional data as documents (source: author). ...	91
Table 4: The process and outcomes of incorporating institutional data as interviews (source: author). ...	92
Table 5: Generic qualitative content analysis procedure applied to all textual data (source: author).	95
Table 6: Environmental properties and basic orientors (source: adapted from Bossel (1999, p.31))	100
Table 7: Human and canine capabilities (source: Nussbaum (2011, pp.33-4) and adaptation).	104
Table 8: Five freedoms (source: Farm Animal Welfare Council (2007); also used by the RSPCA Australia (2014, p.5) in their Approved Farming Scheme).	104
Table 9: Indicator development from cross-tabulating capabilities and orientors (source: author, in part using frameworks adapted from Bossel (1999, pp.27-31) (see Table 6) and Nussbaum (2011, pp.33-4) (see Table 7)).	108
Table 10: Mapping capabilities of dogs to planning functions and outcomes (source: author).	113
Table 11: Quantitative and spatial environmental attributes representing 30 drivers of dog ownership and planning listed by source (source: author, derived from an analysis of DAMPs and Table 2 on page 87).	120
Table 12: Preliminary environmental clusters emerging from the cluster analysis of environmental attributes in Table 11 based on Pearson correlations and p-values in Appendix 9 (source: author). ...	121
Table 13: Benefits of complying with registration (source: author, derived from various DAMPs).	122
Table 14: Common measures of dog population (source: author's DAMP analysis in Appendix 11). ...	123
Table 15: Provision of public open space for recreation (source: author, derived from Land Victoria (2013) (land zoned PPRZ), published council data (see Appendix 6) and DAMP data (see Appendix 5). Equally ranked councils are in alphabetical order in the same cell.)	128
Table 16: Provision of public open space for recreation and conservation (source: author, derived from Land Victoria (2013) (land zoned PPRZ and PCRZ), published council data (see Appendix 6) and DAMP data (see Appendix 5). Equally ranked councils are ordered alphabetically within the same cell.)	128
Table 17: Thematic clusters of councils by animal management approach derived from analysis of pairwise Pearson correlations (source: author, from correlations and p-values detailed in Appendix 9 and raw data corresponding to the attributes described in Table 11 on page 120 and Figure 2 on page 139; reproduced in Carter (2016a)).	153
Table 18: Developing a representative sample of councils by mapping attributes of planning and management of dogs to environmental clusters of councils (source: author, with reference to Table 17).	156
Table 19: Eight councils selected as being representative of Melbourne's planning and management of dogs (source: author, derived from the mapping of attributes to councils in Table 18).	157
Table 20: Macro-trajectory of the <i>Planning and Environment Act 1987</i> (Vic.) (source: author's interpretation of legislative records)	251

Table 21: Evolution of planning schemes in the <i>Planning and Environment Act 1987</i> (Vic.) (source: author's interpretation of legislative records)	252
Table 22: Findings from this study in sequential order (source: author).....	305
Table 23: Recommendations from this study in sequential order (source: author).	307
Table 24: Pearson correlations and p-values corresponding to 30 attributes of dog ownership (see Table 11) and three attributes corresponding to measures of animal management (see Chapter 8).	325
Table 25: Proportion of households with dogs in Australia (source: ACAC (2010, p.16)).....	330
Table 26: The number of dogs per household in Melbourne under different assumptions for the estimated population of dogs and the number of households with dogs (source: author).....	331
Table 27: Council estimates for the number of dogs in their municipality translated into a common 'dogs per 100 people' yardstick (source: author and individual council <i>Domestic Animal Management Plans</i> (see Appendix 5)).	333

Figures

Figure 1: Mapping capabilities of dogs to planning functions and outcomes. A notional set of canine capabilities are in the centre, these being mapped to functions of management and planning at council (source: author).....	114
Figure 2: Weighted proportion of action-oriented text in each DAMP corresponding to education, compliance and enforcement. Average education-compliance-enforcement divisions across the 30 councils are indicated by two horizontal lines (source: author, derived from individual council DAMPs; see Appendix 5 to decode council labels; as published in Carter (2016a)).....	139
Figure 3: The approach to urban dog management along an educational to enforcement spectrum (source: author, using ABS (2011a) cartographic boundary files and data in Figure 2).....	140
Figure 4: The extent of compliance activity in the approach of councils to managing dogs (source: author, using ABS (2011a) cartographic boundary files and data in Figure 2).....	140
Figure 5: A map showing the extent of enforcement activity in the approach of councils to managing dogs along with the concentration of off-leash parks (off-leash park location within council is inexact) (source: author, using ABS (2011a) cartographic boundary files, off-leash park statistics in Appendix 6 and data in Figure 2).	143
Figure 6: Location of eight councils representative of Melbourne's planning and management of dogs (source: author, using ABS (2011a) cartographic boundary files, as published in Carter (2016b) and adapted for Carter, Day and Fryd (2015) and Carter (2016a)).....	158
Figure 7: The composite discipline of planning for dogs in urban environments (source: author).	160
Figure 8: Urban planning's field of concern depicted as a surface of two dimensions: an ontological dimension and an epistemological dimension (source: author, as published in Carter (2016b)).	261

COMMON ABBREVIATIONS

Interviewee designations

AMO	Animal Management Officer
OSP	Open Space Planner
UP	Urban Planner

Other common abbreviations

DAA	<i>Domestic Animals Act 1994</i> (Vic.)
DAMP	<i>Domestic Animal Management Plan</i>
DEPI	Department of Environment & Primary Industries
MPA	Metropolitan Planning Authority
PEA	<i>Planning and Environment Act 1987</i> (Vic.)
POCTAA	<i>Prevention of Cruelty to Animals Act 1986</i> (Vic.)
VCAT	Victorian Civil and Administrative Tribunal
VPPs	<i>Victoria Planning Provisions</i>

PART I: INTRODUCTION

FOREWORD: Domestication of the scallop

Michel Callon's study *Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay* (1986) introduces the concept that distinctly non-social elements present in environments can affect the behaviours of sentient creatures. The scallops, their habitat and the nets used by the fishermen may not speak, but they do affect the behaviours of the fishermen and do cause problems for humans.

Callon documents a problem faced by commercial fishermen of St. Brieuc Bay in France: the fishermen were concerned with depleting numbers of *Pecten maximus* scallops found in the wild and the impact this might have on their livelihoods. In attempting to solve this problem, scientists observed another species of scallop in Japan (*Pecten patinopecten yessoensis*) and translated those observations to the French context by fabricating and installing a particular kind of man-made scallop habitat found in Japan into St. Brieuc Bay. In effect, scientists treated the *Pecten maximus* scallop as not having an identity of their own; the attributes and behaviours of the *Pecten maximus* scallop in a larval form were considered interchangeable with another species found on the other side of the world. In large part by the scallops not being given any sense of individuality, the problem faced by the commercial fishermen could not be solved: the translation from the Japanese to the French context failed.

Importantly, the *Pecten maximus* scallop itself did not have any inherent problem of its doing. It would have been content to live its life naturally according to the ebb and flow of nature. As individuals, the scallops themselves may be content with just being alive and functioning within their species' capabilities. Despite being a problem for the French fishermen, the scallops might not concern themselves with the depleting numbers of their species. A lower population of their species may not be a problem to them, as individuals. Human intervention created and sustained the problem within which the *Pecten maximus* scallop now found itself intertwined. Nature is unregulated and therefore does not obey any regulations or rules enforced upon it, nor does it negotiate. Unsurprisingly, the *Pecten maximus* scallops never took *en masse* to the new man-made habitats developed by the scientists. The scientists were attempting to enforce order on the wild scallops and a form of rebellion ensued.

Scientists interpreted the (small number of) scallops that assented to the new habitats (by choice or chance) as representatives of the entire *Pecten maximus* scallop population. In making this representation, science had curiously defined the identity of ‘scallop’ as resulting from a trace of the new habitat: a scallop is only so when it interacts with the new habitat, otherwise it is not a scallop. However, the scallop is an actor and the new habitat has no agency over the scallop, regardless of science’s attempts to prove otherwise. The scallop is a part of nature and is immune from any rules or regulations that humans may force upon it.

Whereas humans may have a capability of helping another species to (better) realise its potential, any obligation on humans to do so requires a consideration of the interests, rights and justice for animals. Humans are but one species and in order to afford justice to another species, we must represent them in some way. Humans speak for the scallop in Callon’s study through different media: the scientific spokespeople, reports, papers, charts, conference proceedings. It is only through this process that controversy arises, “the manifestations by which the representativity of the spokesman is questioned, discussed, negotiated, rejected, etc.” (1986, p.219). That is, the scallop is only embroiled in controversy when the authenticity of its representation comes into question. The scientists’ assumption of perfect inter-species translation was substantially inaccurate; however, this inaccuracy only became known after empirical evidence was gathered. Until such time that science could gather its evidence, humans continued to interfere with the representative scallops, acting as their representatives, without restraint. This process of representation is how power asymmetries emerge: a contention in my thesis is that *if* these representations are faithful to the represented, *then* justice for the represented is possible. The question of whether humans owe animals justice is thus translated to the question of whether humans owe animals faithful representation.

Callon’s ‘problematization’ of scallop farming is pertinent to providing for dogs in urban environments. The scallop and the dog share much in common in their respective roles in the unfolding human problems. The associations in the case of dogs consist of relationships of shared agency between various actors – both individuals and institutions – governing the mediations of humans and dogs in urban environments. Exploring these interactions provides an opportunity to examine how we morally concern ourselves with the dogs which cohabitate the urban environments within which we live.

1. INTRODUCTION

1.1 Dogs living in human cities

Cities are a human construct, designed by humans and for humans (Tarsitano 2006). Cities belong to a place, sitting within the surrounding environment. Cities might even be described as a part of nature (Bender 2010), a distinctly human habitat that resides within a broader ecosystem. Modern cities are home to humans, but also to plants and animals, some of which have established themselves within the urban environment, others displaced by it, with some sense of order and balance between humans and nature (Sanders, J 2011). Cities are a part of the environment and they change the environment around them.

With their favourable biological and behavioural disposition and penchant for play, dogs are truly a well-matched companion animal for humans (Irvine 2008, ch.1). It therefore comes as no surprise that they are an indisputable part of urban environments and increasingly contribute to modern urban culture (Instone & Sweeney 2014). Many studies demonstrate that dogs provide a range of health and social benefits to their owners and to the communities in which they live (see Chapter 2); however, the overall planning and design of modern cities lacks consideration of the needs of non-humans (Donaldson & Kymlicka 2011, pp.244-5), particularly the needs of pets (Tarsitano 2006). Those needs are increasingly impinged upon by government and environmental interests that control access to and use of public space (Lee, Shepley & Huang 2009); however according to Urbanik and Morgan (2013), there is a growing view among city dwellers that dogs' social and behavioural needs ought to be catered for in the urban public realm (see Chapter 4). Dogs are invading the cultural norms of the urban environment, these changes manifesting themselves particularly in the exclusive or shared use of public open space and the broader public realm, with an expanding body of literature on the implications of dog parks in cities for both dogs and humans. It is therefore unsurprising that Gaunet, Pari-Perrin and Bernardin (2014) identify a critical and present need for more general research on the subject of dogs in cities.

Public open spaces routinely host interactions between dogs and the wider community. In this way, Instone and Mee (2011, p.231) describe dog parks as “enactments of spaces of human-dog relations”, underscoring the importance of dog parks and public open space more generally in understanding dogs in urban environments. As distinct from

the broader public realm, ‘public open space’ can be described in terms of its physical and functional characteristics. In a physical sense, public open space comprises the variety of greenspace found in and around many urban environments such as public parks, reserves, beaches and bushland (also characterised as ‘parks’ or ‘parkland’, this characterisation is broadly consistent with Giles-Corti et al. (2005), State Government of Victoria (2014, p.114) and Weston et al. (2014), amongst others). In a functional sense, public open space offers opportunities for “physical activity, enjoyment of nature, social interaction, and escape” (McCormack et al. 2010, p.712), that space enabling these community capabilities which might otherwise not take place. Public open space can also be constructed socially and in terms of its resource capabilities (Matisoff & Noonan 2012), these perhaps blurring its physical and functional characteristics.

Public open space has an established field of literature in urban planning, urban design and landscape architecture, with some of this literature relevant to the study of dogs; in particular, the small subset of studies focusing on dog parks merges the two fields together. A systematic search of two peer-reviewed citation indexes (*Scopus* and *Web of Science*, updated July 2015) found a number of studies which examined the function of urban parks, including what parks ought to do as a system (Lindsey 1999; Walmsley 2006), what parks ought to do as part of the urban environment (Ward-Thompson 2002), the social and physical environments of the park (McCormack et al. 2010), and what parks ought to do as part of the social world (Goličnik & Ward-Thompson 2010; Kaźmierczak 2013). As a subset of this body of literature, there were a small number of potentially relevant and recent articles relating to dog parks from a variety of perspectives, including as a social or cultural construction affecting urban environments (Instone & Mee 2011; Instone & Sweeney 2014), as a window into the human-dog bond (Bueker 2013; Graham & Glover 2014; Laurier, Maze & Lundin 2006), as a window into the human-dog governance and power relations (Jackson, P 2012; Matisoff & Noonan 2012; Shyan, Fortune & King 2003), and as case study exemplars of particular dog parks or environments and their more-than-human issues (Gaunet, Pari-Perrin & Bernardin 2014; Lee, Shepley & Huang 2009; Urbanik & Morgan 2013).

A meta-study of this literature was undertaken, thoroughly analysing its content from the narrow perspective of understanding the breadth and depth of literature that relates to planning for dogs in urban environments. This meta-study revealed an almost total absence of any scholarly literature on the subject of planning for dogs in urban

environments in a general and comprehensive sense, aside from perhaps Tarsitano (2006) in the environmental planning space and Blanc (2003) as an anecdotal artefact describing philosophical challenges facing French planners past and present who account for dogs in urban environments (see Gaunet, Pari-Perrin and Bernardin (2014) and Urbanik and Morgan (2013)). Any comprehensive and contemporary coverage of the field of planning for dogs in urban environments is clearly lacking at this time, a deficiency which my thesis endeavours to address.

1.2 An inquiry about the urban dog

Despite our best ethological endeavours, humans cannot know what it is like to live as a dog: in a physical sense, we are incapable of wearing another's skin and, in a mental sense, we are incapable of thinking another's thoughts (Dawkins 1985, p.38; Francione 2000, p.6). Humans nevertheless have a substantial impact on a dog's life, including whether a dog is allowed to suffer at their hands. To afford justice for dogs is to provide them with freedoms and opportunities to flourish and realise their capabilities (see Chapters 3 and 6). The emergence of more-than-human geographies in contemporary urban environments challenges how justice is defined and to whom and what the protection of justice is extended (Steele et al. 2012). My thesis examines planning for dogs in urban environments through a lens of justice for dogs.

In Chapter 3, I review the interests and rights of animals leading to a discussion of how philosophical models of justice might apply to dogs. Later in Chapter 6, I articulate four ways which justice for dogs might emerge in practice. Justice as language and action concerns how we individually and as society choose to speak about dogs and act towards dogs. Justice as liberty on the other hand represents the freedom for a dog to integrate and interact with the community and to express themselves through activities like barking, marking territory, play and socialisation. Justice as liberty intertwines with and follows justice as language and action. These actions in turn improve a dog's chance of living an authentic life and opportunities for realising its capabilities, thereby helping each dog achieve the remaining two limbs of justice as authenticity and justice as capability. In defining justice in these four ways, justice as liberty, language and action can feasibly be operational, whereas justice as authenticity and capability can only be indirectly articulated.

In my thesis, I demonstrate that justice for dogs is a human and manifold construction in practice. The nature and application of justice is applied to dogs in a myriad of ways across different urban councils. Justice for dogs manifests in both the *processes* of managing and planning for dogs in urban environments and the *outcomes* in the liberties and environments which then lead to a set of opportunities for dogs to realise their own authenticities and capabilities, in their own ways. The difference in freedoms and environments between local government authorities (councils) in my instrumental case of Melbourne, the capital city of the state of Victoria, Australia, is interesting in its own right as the underlying phenomenon of dogs in the urban environment is essentially the same. In other words, there is a lack of consensus on how dogs ought to be treated in the urban environment. This premise forms the basis of my core inquiry:

Research problem: Local government authorities (councils) in Melbourne plan for dogs using a variety of approaches, this representing evidence of a lack of societal consensus on the best treatment of dogs by councils. The outcomes of these treatments of dogs by councils affect each dog's access to freedoms of liberty, language and action. That outcomes, hence justice, differ between individual councils in Melbourne provides an opportunity for investigation of how different approaches to the treatment of dogs, both in management and planning, produce different outcomes of justice for dogs.

In Chapter 4, I introduce human agency as a precursor to a broader recognition of the interests and rights of dogs in the urban environment. In making decisions of how we act towards dogs, speak about dogs and provide freedoms for dogs, we exercise our agency over dogs in performing these actions. Human agency is thus related both to what planning we do and how that planning is done, what values we ascribe to dogs and how we act on those values in our role as planners and in our construction of human institutions like councils. Human agency is not an institutional condition, but institutions plan based on the representations of humans. Human agency thus introduces two branches of inquiry, the normative and the actual.

Normative elements represent the planner's and the institution's own ideological standpoints and, perhaps, those of the community. These represent the ontologies and values of the elected councillors and the council officers as to how they plan, creating a composite institutional ontology. These ontologies and values precede the execution of actions, informing what decisions are made and what actions take place. Anthropocentrism is a core consideration in planning for dogs as it encapsulates how dogs are spoken about, how they are included or excluded relative to humans, how they

rank and how actions in respect of them are prioritised; crucially however, the practice of planning is not *a priori* anthropocentric, with the question of whether planning is anthropocentric in practice discussed in detail throughout Chapters 12 and 13. Therefore I will simply include ‘values’ as a normative element and within that speak about anthropocentrism through the institutional data.

The outcomes of planning in the urban environment on the other hand, the actual, can be physical in construction such as the allocation and fencing of public open space or can take the form of institutional freedoms enshrined in the myriad of regulations. The simple observation of these outcomes is not intended to inform any potential for dogs to lead an authentic life outside of domestication; rather, those observations reflect the nature and extent of different kinds of observable justice as liberty, language and action. In my view, it remains acceptable to speak of ‘just outcomes’ as I am referring to how the outcomes of various planning processes affect a dog’s access to freedoms of liberty, language and action.

Human agency is different to ‘values’ however; the creation of human agency is an action of planners in taking into account the representative humans (dog owners) which claim to represent dogs (such constructions of agency are introduced in Chapter 4), leading to consideration of justice as authenticity through the inclusion of both ‘values’ and ‘actions’. There is nevertheless no measure of whether humans authentically represent the needs of dogs, however the preceding limbs of justice which humans can control, i.e. justice as liberty, language and action, each work to enable dogs to have opportunities to realise capabilities and authenticity, whatever those may be. My research questions are consequently framed around planning in the normative and planning in practice:

Research Question 1: Through their normative conceptions of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

Research Question 2: In the practice of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

These inquiries are understood through a range of institutional discourse, where language, actions and inactions, and the resulting urban environment together provide an image of justice for dogs. Justice as language and action concerns the way we as an

urban society speak about dogs and act towards dogs through institutional discourse, this largely representing the process of planning. Language and action includes both the words used and inference from actions taken and not taken, this data gathered through critical analysis of institutional discourse, including written documents such as agendas, minutes, papers, plans and policies, together with transcripts from a program of interviews with institutional representatives. The outcomes of that planning process engender justice as liberty through the provision of both physical and regulatory freedoms. The process and outcomes of planning for dogs in urban environments are examined critically through a disciplined qualitative content analysis of this institutional discourse with grounded theory emerging from this data, these together forming my thesis exposition in Chapters 10 to 14 (Part V).

The research questions are important in both an absolute and a comparative sense. Addressing these questions through a critical theory perspective provides an insight into how planning for dogs takes place in practice, how aware of that practice planners are and thus how they might change the way they plan to influence different outcomes. Armed with these inquiries, my thesis then ostensibly fulfils its core objective, describing how planning can contribute to a dog living a more authentic life, whatever that may be.

1.3 Planning for dogs in cities

Before I continue much further, it is important to establish what I mean by the terms ‘planner’, ‘planning for dogs’ and ‘community’. Throughout my thesis, ‘planner’ is used to describe a person that practices an aspect of planning for dogs in a broad sense, these roles including animal management officers, open space planners and urban planners which are employed by the institutions of councils and the Victorian government. In some instances, particularly in Part V but also elsewhere, I seek further specificity and in those moments I choose to explicitly identify the kind of planner using their full title to focus my narrative on a particular discipline. ‘Planning for dogs’ consequently defines the composite discipline which comprises all three planners as their work relates to the subjects of planning, dogs and urban environments within the community. Consistent with broader planning discourse in Victorian local government, ‘community’ generally consists of human associations, however I recognise that those associations can involve multiple contexts and stakeholders (Jackson, J & Natoli 2001).

The term ‘philosophy’ is particularly interesting and important to understand as well since it engenders different meanings throughout my thesis. As is typical in academic circles, the term ‘philosophy’ embodies the body of scholarly work and thought within a tradition and represents the wares of a philosopher. My thesis is however both a scholarly work and necessarily grounded in the practice of planning for dogs, where in an applied sense the term ‘philosophy’ embodies a mentality or guiding framework upon which decisions are made and actions are taken by an individual, a profession or an institution. In my thesis, I set out to describe these mentalities in some detail, finding them in large part to rely on ontological considerations but also going beyond the realms of pure ontology too. Further in conclusion, I suggest attributes of future mentalities which are amenable to planning for dogs, these representing the development of an applied philosophy of justice for dogs within the confines of the composite discipline of planning for dogs in urban environments.

My thesis creates a blueprint for how this composite discipline functions in practice and provides some understanding of why it functions the way it does. Following this introductory chapter, my thesis is divided into four subsequent parts. In Part II, I provide an overview of three branches of literature which form the bedrock of planning for dogs. In Chapter 2, I explore dogs in urban communities through four perspectives: how dogs affect human health and social relationships; how humans have reciprocal responsibilities for the welfare of dogs in our care; how the nuisance of dogs is managed; and, finally, how we speak about dogs and how this might affect our perception of the interests and rights of dogs in the community. In Chapter 3, I systematically explore the interests and rights of animals, and examine the special case of domesticated animals. Normative ethics are introduced as foundations for various frameworks of justice, these reflecting how the interests and rights of animals are recognised in practice. Two contrasting frameworks of justice are introduced and critically discussed, ultimately informing a potential justice for dogs. In Chapter 4, I endeavour to understand the civic identity of dogs as a foundation to consider how urban planning might tackle the subject of dogs. I begin by exploring different models of agency and the importance of identity in developing a civic presence, leading to a discussion on how a citizenship for dogs might evolve. Following this, I explore how urban planners shape the environments within which dogs and humans coexist and how

urban environments and citizenships are created. The importance of (local) councils in planning for dogs is shown to be profound.

Anthropomorphism presents a critical problem of credibility in studying planning for dogs. In Part III (Chapters 5 and 6), I develop a theoretical methodological framework which addresses both my approach to researching planning and dogs and my rationale for taking that approach. Subsequently in Part IV (Chapters 7 to 9), I turn to operationalising that methodological framework in the context of my case study. These five chapters together provide a comprehensive overview of how I have managed the critical problem of anthropomorphism in undertaking my study.

In Part III, I provide a theoretical overview of my methodology and approach to operationalising justice from a theoretical perspective. In Chapter 5, I introduce my instrumental case study of Melbourne as the location of my study and a sample of its 31 councils as my units of analysis. Through arguments of anthropomorphism and credibility, I substantiate and describe the form and collection of institutional data as documents and interviews. I then describe how that data will be analysed, outlining my naturalistic qualitative content analysis procedure which is formulated in the spirit of developing a thick narrative and grounding theory through this data. Changing tack, Chapter 6 develops an applied justice for dogs through operationalising the (human) capabilities approach. Of critical importance, this chapter yields the basis for both the content and audience of the program of semi-structured interviews and identifies animal management, open space planning and urban planning as the component disciplines which comprise planning for dogs in urban environments.

In Part IV, I apply the theoretical methodological framework from Part III in the context of my instrumental case, Melbourne. Chapter 7 introduces quantitative and spatial perspectives, developing a preliminary set of environmental clusters capturing the phenomenon of dogs in Melbourne which informs the later selection of a representative sample of councils. In contrast, Chapter 8 introduces qualitative perspectives to understand the phenomenon of dogs in Melbourne through a qualitative content analysis of each metropolitan council's *Domestic Animal Management Plan* in order to develop and apply a classification schema of animal management approaches of councils. I then introduce the subject of institutional ontology, a concept which is intimately related to the process-outcomes dichotomy introduced earlier in section 1.2 and ultimately defines

how I have structured my thesis exposition in Part V. Chapter 9 applies the information from earlier in Parts III and IV to develop a robust, representative sample of councils which forms my units of analysis. The significant role of institutional ontology as reinforcing the structure of the forthcoming results narrative in Part V concludes the series of theoretical and applied methodology chapters.

Part V comprises my thesis exposition, each discipline being examined in turn and concluding with a capstone narrative which forms my discussion and conclusions from these results, situating my thesis in the context of the more-than-human geography literature. Chapters 10 to 13 develop a thick description of planning for dogs through the voices delineated by institutional ontology of animal management, open space planning and urban planning. Through the voices of planners in Melbourne councils and the Victorian government, an image of planning for dogs in urban environments emerges. The findings from my research are both theoretically interesting and of importance to practitioners. Moreover, a number of practical recommendations are presented which complement specific findings. Chapter 14 completes the circle, addressing my research questions and developing an applied philosophy of justice for dogs through these voices of planners. My thesis is finally framed in the body of more-than-human geography literature, suggesting future directions for research which examines phenomena of non-human species and urban environments.

My thesis contributes to a critical literature on more-than-human geographies and provides a practical insight into a city which embraces both humans and other species (such as the *Zoöpolis* of Wolch (1996) and its later incarnation of Donaldson and Kymlicka (2011)). In a practical sense, there is a basic need to account for pets in urban planning (Tarsitano 2006) and perhaps more fundamentally there is a need for urban planners to adjust their philosophy to accommodate dogs (Instone & Sweeney 2014; Jackson, V 2007; Tarsitano 2006). The key objective of my thesis is to assist planners, be they animal management officers, open space planners or urban planners, to critically reflect on their own guiding values and philosophies around planning for dogs. These critical reflections strengthen their understanding of how to best incorporate dogs into their existing strategies and plans. I do not expect my thesis to change the position of animal management, open space planning and urban planning as broadly focussed on human needs and outcomes; rather, my thesis equips planners to confidently embrace opportunities to plan for dogs in their everyday work.

PART II: LITERATURE REVIEW

2. DOGS AND THE COMMUNITY

In literature and in life, dogs are commonly inferred and referred to as ‘man’s best friend’ (McConnell et al. 2011; Urbanik & Morgan 2013). Dogs are the most popular pet in Australia, with 39% of households owning a dog and an overall population of 4.2 million dogs, equating to around 19 dogs per 100 people (Richmond 2013). This chapter accordingly sets out to explore dogs in the community through four perspectives. I begin in section 2.1 by examining the impact of dog ownership on human health and social relationships. In section 2.2, I turn to examine the reciprocal responsibilities of humans towards the welfare of dogs in their care. Some dogs however cause nuisance to the broader community and their presence in the community is not without controversy; accordingly in section 2.3, I explore the nuisance of dogs, both what that nuisance is and how it is managed in practice. Finally in section 2.4, I briefly consider how we speak about dogs and frame some issues of interests, rights and justice that will be explored in forthcoming chapters. This chapter establishes the foundation upon which my empirical study of planning for dogs rests.

2.1 The impact of dog ownership on human health and social relationships

In their well-cited paper on the effects of pet ownership on human health, Wood, Giles-Corti and Bulsara (2005) categorise the human-animal bond as having therapeutic, physiological, psychological and psychosocial impacts on humans. For the remainder of this section, I loosely follow their structure to understand the health and social impacts of dog ownership.

Physiological and therapeutic impacts of dog ownership

Pets were identified as therapeutic aids by Florence Nightingale (1860, p.63), however the need to formally study pets in such a setting was identified nearly 100 years later (Foote 1956). Sigmund Freud was the first psychoanalyst to actively use dogs as part of mental health therapy of his patients (Walsh, F 2009b), however Levinson (1965) documents the first study to formally identify animals as having a therapeutic benefit and influenced interest in the research field of human-animal relationships (Beck & Katcher 1983, p.xvii; Bryant 1979), following his initial presentation of the ‘dog as a co-therapist’ to the American Psychological Association (Levinson (1961) in Levinson (1983, p.537)). Following the research of Levinson (1965) and others on the use of pets in therapeutic settings, Bryant (1979) describes the need for sociologists to broaden

their focus and express interest in understanding the influence of animals on human social behaviour. Friedmann, E and Thomas (1985) recount the lack of systematic investigation from this era that explored the effects of the human-animal bond on families. Friedmann, E et al. (1980) was the first medical study which directly attributed health benefits to pet ownership (Beck & Katcher 2003), henceforth shifting the theoretical perspective of human-pet research from the metaphysical to the scientific (Serpell 2000, pp.14-5). Since 1980, there have been a host of studies undertaken that both support and challenge the health benefits of pet ownership in different contexts.

Friedmann, E and colleagues followed their 1980 study into cardiovascular disease and dog ownership with two further studies, each replicating and expanding upon the findings from the initial study. Friedmann, E and Thomas (1995) find that dog ownership and access to social support are significant predictors of one-year survival following a heart attack. By focusing on people that are recovering from similar severe health episodes, this study removes the confounding influence of the health of people that choose to own a pet in understanding the health benefits of pet ownership. Friedmann, E, Thomas and Son (2011) provide further evidence in support of the 1980 study.

The Friedmann, E and colleagues' studies were not the only foray into physical health and the human-animal bond. In their study over three years, Anderson, W, Reid and Jennings (1992) find that pet owners exhibit lower risk factors for cardiovascular disease than those of similar socioeconomic means without a pet, paving the way for pet ownership to be widely regarded as protective of the heart in and of itself. Since publication and wide acceptance of both the Friedmann, E et al. (1980) and Anderson, W, Reid and Jennings (1992) studies, there has been substantial research attention paid to the association between dog ownership and cardiovascular health. Levine et al. (2013) provides a consolidated review of this field of research, concluding that dog ownership is probably associated with a reduced incidence of cardiovascular disease and suggesting that a causal relationship might exist.

Cutt et al. (2007) comprehensively survey the literature on the relationship between dog ownership, health and physical activity. Overall, there is strong support linking dog ownership to positive health outcomes, with subsequent studies finding that dog ownership increases recreational walking (Cutt, Knuiman & Giles-Corti 2008) largely

due to the dog acting as a catalyst and companion for the owner to exercise (Cutt et al. 2008), particularly so where facilities to exercise the dog exist (Christian, Giles-Corti & Knuiman 2010). The Cutt/Christian series of studies formalise and confirm such earlier perceptions that dog ownership encourages more exercise, improving the general health of the dog owner (Bauman et al. 2001; Ham & Epping 2006; Serpell 1991). In revisiting the Cutt/Christian series of studies, Higgins et al. (2013) affirm the principal motivations for dog-walking and suggest in addition that the owner's empathetic stance towards their dog is also a contributing factor to their motivation for exercise. A number of recent studies likewise confer similar general health benefits of dog-walking (Epping 2011; Lentino et al. 2012) and that dog ownership confers an increased opportunity to exercise across all weather and seasons, improving year-round health (Lail, McCormack & Rock 2011). As an important caveat, this positive effect may reduce when the dog-walking activity is predominantly off-leash (Rock et al. 2016). Johnson et al. (2011) sketch future research opportunities in the relatively new field of dog-walking and health, in the process identifying methodological barriers present when studying pets.

The scientific community however lacks consensus on the impacts that dog ownership has on physiological health outcomes. Parslow and Jorm's studies (2003a, 2003b; 2005) represent perhaps the first series to conclude that a general relationship linking pet ownership to physical health benefits is unsupported. There have been a number of studies since which show a lack of benefit of pet ownership in different contexts. Winefield, Black and Chur-Hansen (2008) consider that a combination of exercise and human social companionship is of greater influence than pet ownership towards good physical health for the elderly. Pointing to possible ancillary benefits of pet ownership, Rijken and van Beek (2011) find some evidence suggesting that pet ownership is linked to greater exercise in the elderly, however find little support for pet ownership as beneficial for general health, mental health, socialisation, loneliness or ambulatory care. In contrast, Arhant-Sudhir, Arhant-Sudhir and Sudhir (2011) find that the benefits of dog ownership on cardiovascular health cascade from positive psychosocial effects rather than any direct linkage.

Utz (2013) supports the contention that dogs provide some mental health benefit to their immediate carers but provides an interesting contrast to these studies in other ways, finding that selection bias is the most influential driver of positive physical health

outcomes from dog ownership, largely driven by socioeconomic circumstances; indeed, her study finds that any physical health benefit vanishes after controlling for socioeconomic circumstances. Given that the cost of maintaining pets may constrain ownership for those in the community facing economic hardship (Beck & Katcher 2003), it is important to consider the drivers of pet ownership and health. Friedmann, E and Son (2009) catalogue key health research from the preceding 20 years, concluding that an association between pets and health benefits resolves to an association between determinants of pet ownership and health benefits. This inference is supported by Siegel et al. (1999), Arhant-Sudhir, Arhant-Sudhir and Sudhir (2011), Black (2012) and Utz (2013) among others, and in part explains the conclusions of Beck (2000) that the role of animals in therapeutic situations is minor and confounded with many other medical and environmental variables.

Potential health benefits of pet ownership translate into economic benefits for the broader community. Headey and colleagues' series of longitudinal studies quantify pet ownership as a saving of 5% of total annual health expenditure (Headey 1999), the studies concluding that pet ownership leads to fewer visits to the doctor (Headey & Grabka 2007) and improved actual and self-reported health outcomes (Headey, Na & Zheng 2008), particularly for owners that have owned a pet for at least five years (Headey et al. 2002). Bauman et al. (2001) quantifies additional savings of \$175 million per annum (2001 Australian dollars) if all Australian dog owners regularly walked their dogs. Together, these studies point to financial benefits to the government and the community in supporting active dog ownership.

Social and mental health impacts of dog ownership

Loneliness consists of an awareness of being alone together with an unpleasantness arising from social isolation, emotional isolation and the quality or quantity of existing relationships (de Jong-Gierveld 1987; Rew 2000). The community plays a significant role in the health and satisfaction of its citizens through its norms (Fernandez & Kulik 1981; Lochner et al. 2003) and it is these norms which define loneliness in a relative sense. Heinrich and Gullone (2006, p.696) contend that "satisfying social relationships are vital for good mental and physical health", supported by the research of House, Landis and Umberson (1988), Ellen, Mijanovich and Dillman (2001), Lauder, Sharkey and Mummery (2004), Caspi et al. (2006) and Cacioppo et al. (2006), among others.

The human-pet bond has potential to reduce loneliness and thus contribute positively to their owner's physical and mental health in a number of ways. Pets provide social support to vulnerable groups including the homeless (Kidd & Kidd 1994), gay and bisexual men who suffer from HIV/AIDS (Siegel et al. 1999), and elderly men (Hecht, McMillin & Silverman 2001); in this way, Heinsch (2012) finds that social workers could help their clients by embracing the importance of the human-pet bond as part of their role. Within the family unit, children and adolescents are also shown to benefit socially and emotionally from the human-animal bond (Black 2012; Williams, J, Muldoon & Lawrence 2010) and more generally, humans are shown to benefit from the company of more familiar or friendly animals (Friedmann, E & Son 2009; Utz 2013; Walsh, F 2009b); indeed, Kaźmierczak (2013) finds that a mere presence of dogs in parks, whether familiar or not, provides a reassuring companionship for humans. These studies suggest that a broad, scholarly consensus linking dog ownership and positive mental health outcomes exists; moreover, scholars appear to more consistently agree that dogs contribute to positive mental health outcomes than any direct links to specific physical or therapeutic benefits.

The close bond between humans and dogs in particular encourages greater socialisation in public, with the dog's 'social lubricant' function placing it in the various roles of attention-seeker, conversation topic, conversation starter and entertainer (Veevers 1985). A number of studies have explored the 'social lubricant' function in different contexts and found it to be effective, including for social encounters facilitated by dogs in and around parks (Messent 1983), those facilitated by service dogs (Eddy, Hart & Boltz 1988), those facilitated by dogs in the street (McNicholas & Collis 2000), and as a precursor and support for greater political advocacy and civic engagement in the grassroots community (Bueker 2013). In a more social-therapeutic context, dogs are also shown to act as social lubricants in awkward social situations, taking on a role of comfort and support (Walsh, F 2009b).

Whether the human-pet bond is complementary or additive to other social relationships more generally remains controversial. Irvine (2008, ch.1) contends that the 'deficiency argument' (her term for a complementary social relationship) is flawed on two accounts: firstly, that people who own pets are no different to those who do not own pets, and; secondly, that the incidence of pet ownership amongst people who live alone is less than the incidence of pet ownership of multi-person households. McConnell et al. (2011)

support this conclusion, the authors finding that pets provide a substantial contribution to human social wellbeing in their own right. The earlier study of Zasloff and Kidd (1994) however finds support for the social support role of dogs being heightened for women who live alone compared to living with others. The contribution of the human-pet bond to social wellbeing may therefore be dependent on the strength of the individual bonds connecting humans to their pets rather than the presence or absence of a human social network.

Finally, pets are known to take on a surrogate role in place of human family, particularly children (Knight & Edwards 2008). The strength of the relationship humans have with their pets is perhaps no more evident than the experience of grief on the loss of a pet (Friedmann, E & Thomas 1985; Knight & Edwards 2008; Kwong & Bartholomew 2011; Sanders, C 2003). In situations of grief, it becomes evident that society does not universally view these relationships as healthy or perhaps valid (Morales 1997; Simon 1984). In order to normalise their relationships with their pets for the outside world, human owners tend to cede some of their individuality to the pet and in doing so ‘couple’ with their pet in public (see Sanders, C (2003) and my discussion on agency and identity in Chapter 4).

The body of literature in this section clearly does not reach any consensus of the precise nature and extent of health or social impacts of dog ownership to owners and the broader community. There is however broad agreement that dogs do provide *some* health and social benefits, whatever the nature and extent of benefits might be, and consequently that dog ownership has intrinsic value to urban communities. The next section introduces a contrast, examining the welfare obligations imposed on dog owners and the broader community as a result of our keeping of dogs in urban environments. These obligations can likewise be construed as social costs that are exchanged for the diverse benefits which dogs bring to the community, whatever those benefits might be.

2.2 The welfare of dogs

In an evolutionary sense, Morey (2010, p.67) describes domestication as the “development of a symbiotic relationship between two organisms, with evolutionary benefits to both”. This dual agency framing appears to have emerged over recent times, developing from an understanding of a human process of breeding for purpose (Anderson, K 1997; Beck & Katcher 1996, pp.165-6) to understanding domestication as

a long process with shared agency of both humans and animals (Donaldson & Kymlicka 2011, p.85; Irvine 2008, ch.1). Wolves in particular are now understood to have undergone substantial physiological and social changes through domestication, affecting their quality of life and growing ever more dependent on humans for basic functioning and socialisation (Morey 2010, pp.70-1). Domestication raises questions of dignity, rights and suffering, with broader implications shaping justice for dogs (see Chapter 3).

Bringing domesticated dogs into the community is an exercise of human agency and in turn confers responsibility for consequences of those actions on dogs (Donaldson & Kymlicka 2011, p.101), even if we do not know precisely what those consequences are (Dawkins 1985, p.38). Since dogs generally adjust easily to captivity and interact well with humans, they have widespread use in therapeutic and service situations in both institutionalised settings and the private home (Beck 2000); it is through this lens that I commence my review of the welfare of dogs in human society.

Institutionalised settings refer to such environments as hospitals, nursing homes and prisons within which dogs create a safe environment that is conducive to recovery, rehabilitation and an improved quality of life (Bardill & Hutchinson 1997; Crowley-Robinson, Fenwick & Blackshaw 1996; Katcher, Beck & Levine 1989; Walsh, P & Mertin 1994). Service dogs also use their heightened senses and intelligence to serve the community in difficult roles such as explosives, drug and cancer detection, and human search and rescue (Gordon et al. 2008; Lippi & Cervellin 2012; Morey 2010, pp.208-14). In these work settings, an absence of basic caregiving can result from shared ownership and a lack of individual responsibility, with possible consequences of incorrect feeding, inadequate relaxation and play opportunities, inadequate veterinary attention, and overwork (Beck 2000; Beck & Katcher 2003). Such neglect can lead to depression where the dog is involved in emotionally taxing and unrelenting service such as human search and rescue (Morey 2010, pp.208-14) and exposure to mortal danger in high-risk settings such as prisons and psychiatric institutions (Iannuzzi & Rowan 1991). Welfare implications also arise at the time of rejection or retirement from service (Beck 2000).

In a private home setting on the other hand, welfare implications are potentially more difficult to identify. Beck (2000) describes the therapeutic benefits of dog ownership for the elderly and vulnerable in the community and raises concerns over the

appropriateness of housing and the welfare of the dog where the owner predeceases their pet. In contrast, Friedmann, E and Son (2009) raise the concern of zoonotic disease transmission between pets and their owners and a general reluctance of owners to seek advice from physicians regarding their health or veterinarians regarding appropriate pet-keeping, exposing owners to the risk of sickness and introducing a further welfare consideration of pet-keeping.

Emergencies and disasters are perverse situations which introduce moral crises where humans have a heightened instinct to preserve human life despite remaining responsible for the welfare of non-human animals under their care (Francione 2000, p.xxii). Certainly inspiring media attention but perhaps an impetus for change, Irvine (2009) recounts a moving story of ‘Snowball’, a dog confiscated by police from a boy evacuating New Orleans in the wake of Hurricane Katrina as dogs were not permitted on the public bus at the time. Since 2005, Irvine finds that various governments have eased restrictions to improve the welfare of animals in emergency situations; nevertheless the moral crisis is not necessarily eased by the introduction of government policy, with pets still abandoned by their owners when faced with life-or-death decisions. These moral crises are briefly explored in Chapter 3 of my thesis (see also Donaldson and Kymlicka (2011, p.42) and Francione’s (2000) ‘burning house’ scenario).

In providing dogs with opportunities to flourish in urban environments, they necessarily participate in both the public and private realm in ways which may be perceived as a nuisance to some in the community, including their owners. Dogs are a controversial subject in the urban environment, one which can simultaneously be of benefit to some, be of nuisance to others, and all the while require our concern for their welfare.

2.3 The nuisance of dogs

Despite nuisance being inherent to the subject, to understand the nuisance of dogs is to consider the two opposing forces of community disharmony and restorative balance. On the one hand, nuisance is disharmonious and manifests in the dog or their owner conflicting with community expectations. On the other, the regulation of nuisance captures those expectations, identifying what behaviours are acceptable of dogs and their owners with a view to resolve the complex dynamic between dogs and the broader community. I explore the nuisance of dogs through these two strands in turn, providing

an image of what the community expect of dogs and their owners and how the interaction of dogs and the broader (human) community plays out in practice.

Understanding the nuisance of dogs

The nuisance of dogs is all pervasive throughout our urban environments, its reach knowing no bounds and affecting both public and private spaces alike; however it remains that the nuisance (albeit often present and real) is prone to overstatement in terms of both its nature and extent of impact on humans and other non-human animals in the community (Gaunet, Pari-Perrin & Bernardin 2014). The nuisance of dogs is not just a matter for the broader community to contend with; both current dog owners and those who would like to own a dog grapple with nuisance, albeit of a different kind perhaps (American Humane Association 2012; Chur-Hansen, Winefield & Beckwith 2008). These subjects of nuisance provide a basic structure to guide discussion to understand the nuisance of dogs in practice.

From the perspective of current or prospective dog owners, the nuisance of dogs and the real or perceived barriers to dog ownership can be deemed similar. The American Humane Association (2012) describes three different kinds of barrier to pet ownership which provides a useful substructure: the costs of responsible pet ownership, lifestyle factors and structural factors within urban environments. These will be briefly reviewed in turn.

The costs of keeping pets responsibly is a significant constraint of ownership, particularly for those facing financial hardship (Beck & Katcher 2003). Veterinary expenses tend to comprise the largest proportion of expense for owners who attend their vet, these expenses being relatively inelastic and perceived as expensive relative to the services rendered (Coe, Adams & Bonnett 2007, 2009; Wolf, Lloyd & Black 2008). Nowadays, pet insurance is perhaps considered part of being 'responsible' (Fox & Walsh 2011, p.101); this is challenged however by the mixed uptake across different cultures and demographics ranging from 2% in parts of North America to 78% in Sweden, with younger demographics more inclined to purchase pet insurance in Australia (Asher et al. 2011; Olsen 2009; Richmond 2013). Besides essential veterinary expenses and food, modern pet ownership can include luxuries such as day-care, nurseries, playgroups and 'dog yoga', together with access to advanced or elective veterinary treatments (Fox & Walsh 2011, pp.100-1). In years gone by many of these

costs would have been considered extravagances, and they may still be, however they are not themselves nuisances since they are mostly avoidable. Costs nevertheless remain a key barrier to pet ownership for some.

There are a number of studies which examine why people abandon pets at animal shelters, these providing some insights into lifestyle barriers introduced by pet ownership. These studies demonstrate that most relinquishments for lifestyle reasons can be classified as either due to housing issues, unmanageable behavioural issues with the dog and general lifestyle changes including changing employment circumstances (Arkow & Dow 1984; DiGiacomo, Arluke & Patronek 1998; Salman et al. 1998; Shore, Petersen & Douglas 2003). These lifestyle factors may be forced or discretionary in nature, with Chur-Hansen, Winefield and Beckwith (2008) finding that human convenience is a key determinant in the decision not to own a pet however identifying the need for further research on the lifestyle reasons behind non-pet ownership.

In many cases, pets are abandoned because landlord or lease conditions do not allow for pet ownership (Carlisle-Frank, Frank & Nielsen 2005; O'Haire 2010; Power 2013; Shore, Petersen & Douglas 2003). Boarding and share houses and shelters often prohibit pets, providing a barrier to pet ownership to those in the community that have limited housing options (Wolff & de-Shalit 2007, p.57; Zimolag & Krupa 2009). Indeed even where allowed, living with pets in apartments or condominiums can generate social stigma and embarrassment for the owner (Power 2013). There remains interest in some jurisdictions to move towards more pet-inclusive residential leases (Huss 2005; Palluzi 2013), these efforts being accompanied by efforts to redress the balance more generally through a combination of smaller localised programs (Wood 2009) and national campaigns like *Keep Australia Pet Friendly* (Brown, C 2016), nevertheless the right of pet ownership more generally remains a contested space.

Beyond the home, there are a number of nuisances of dogs in the broader community. As with many other parts of the world, dogs in Australia face many restrictions on where they can go and what they can do in order to maintain harmony with the broader community, these restrictions including access to public transport, and access to and use of shared public spaces and public open space (Instone & Mee 2011; Instone & Sweeney 2014; Power 2008; Rohlf et al. 2010). Regulation nevertheless has a role and strikes a balance between public health, safety and amenity on the one hand and

responsible pet ownership on the other (Huss 2005). This is a useful dichotomy through which to examine the nuisance of the ‘public dog’, a social construction which I broadly accord with the meaning and usage of Howell (2012, p.222) as distinct from ‘private’.

Public open space is contested by various uses that take place to the inclusion or exclusion of others, perhaps none more illustrative than dog parks. Dog parks are a specific open space established for the purpose of allowing dogs to run off-leash (Matisoff & Noonan 2012; Urbanik & Morgan 2013); what appears key in defining a ‘dog park’ is the purposeful nature of its construction *for* dogs (perhaps to the exclusion of others as in Tissot (2011)). In saying this however, not all individual dogs have the capacity to experience the dog park in a harmonious way; indeed, in their inclusiveness towards all dogs, the dog parks themselves exclude vulnerable and less confident dogs and their owners, the larger and more boisterous dogs causing their own form of regulated nuisance towards others of their kind (Jackson, P 2012). In terms of planning of parks more generally, be they dog parks or general public open space, Cutt et al. (2008) find that many responsible dog owners recognise the need to separate their dogs from other conflicting activities, particularly children’s playgrounds, in order to avoid nuisance and potential risks to public safety such as dog bite.

Community education programs which focus on dog bite prevention have proven effective in reducing the incidence of dog bite over time, particularly with children (Gilchrist et al. 2008), however there remains a need to ensure education programs target both adults and children to ensure messages are communicated effectively (Davis et al. 2013; Morrongiello et al. 2013; Victorian Injury Surveillance Unit 2009). Dog bite and other dog-human contact introduces potential public health risks for the broader community (Friedmann, E & Son 2009). Immunocompromised individuals are particularly susceptible, and further education of healthcare and veterinarian professionals is considered beneficial to balance the public health risk against the benefits introduced by the human-animal bond (Hemsworth & Pizer 2006; Mani & Maguire 2009; Robertson et al. 2000).

More generally, perhaps borne from the image of ‘dog catcher’, responsible dog ownership education seems to herald less community praise; in the historical account of Sanders, J (2011), some in the 1970s Seattle community saw such education as an overbearing symbol of authority and repression of social freedoms with their decision to

not comply driven by cultural rather than scientific rationales. Despite there being an arguably greater awareness of the importance of responsible dog ownership nowadays, Williams, K et al. (2009) find that education programs do not necessarily translate into improved responsible behaviours or compliance with regulations; an implication of this study is that the lack of internalisation of responsible dog ownership practices represents a significant hurdle for educators. In contrast, Tardona (2012) describes a successful program of responsible dog ownership education which empowers the dog owner to understand the reason for complying with the regulations and provides them with positive reinforcement following mending their ways. As a further step, Matisoff and Noonan (2012) favour an approach which the community actively participate in formulating the regulations themselves.

In some respects, Tardona's approach borrows from contemporary shifts in dog training. In recent times, dog training technologies have transformed from the use of choker collars and domination of human over dog to the positive reinforcement and partnership between human and dog (Irvine 2008, pp.58-61). These contrasting approaches can be understood through a capabilities lens too: whether individual dogs ultimately seek achievement or happiness for their satisfaction and fulfilment (Haraway 2003, pp.43-54); in other words, it's not always as simple as one or the other.

The contemporary approach to the training of dogs – positive reinforcement – is a deeply reflexive exercise with the roles of trainer and student being constantly exchanged between human and dog (Haraway 2008, pp.63-5); indeed, the training program seems to produce something close to symbiosis in Haraway's example by reducing the disharmony of nuisance as humans and dogs become more attuned to one another. What remains then is to understand how balance is restored when disharmony persists between human and dog, introducing the role of regulation.

Regulating the nuisance of dogs

Perhaps to be 'out of sight', dogs are predominantly kept in backyards rather than front yards for reasons of both community amenity and security (Daniels & Kirkpatrick 2006), with both the nature and quality of the bond between dog and owner and the size of backyard influencing canine behaviour: a larger backyard and greater human contact are key indicators of improved obedience (Kobelt et al. 2003; Kobelt et al. 2007). The World Organisation for Animal Health (2012, s.7.7.6) underscores the importance of the

role which the owner plays in ensuring the welfare of the dog and its safe interaction with the community. Regulations help society control the nuisance of dogs and balance the needs of dogs (and dog owners) with the needs of the broader community (Instone & Mee 2011).

The formal regulation of the conduct of dogs is fundamentally a human institution within which owners act in agency for their dogs to both interpret and negotiate the rules to meet community expectations (see also Chapter 4). Owner infractions of non-compliance have the potential to affect the perception of dogs in the broader community (Rohlf et al. 2010; Williams, K et al. 2009), with responsible dog owners known to actively manage the community perception through self-regulation and the social exclusion of recalcitrant owners (Graham & Glover 2014) or of themselves if they are at fault (Jackson, P 2012). Nevertheless whilst infractions may affect perceptions, this is not to say that the urban environment itself is necessarily affected in a detrimental way (Toohey & Rock 2015). There remains relatively scant empirical literature exploring the regulation of dogs, particularly around barking as a private-public nuisance (Flint et al. 2014; Pongrácz, Molnár & Miklósi 2010) and dogs in public more broadly (Brown, K 2014; Weston et al. 2014).

Nuisance barking represents a common (if not the most common) community complaint regarding the keeping of dogs as pets and is a ‘prime irritant’ of the broader community (Fielding 2008). Nevertheless, whilst certain types or intensities of barking are construed as ‘nuisance’ by some, barking remains a purposeful activity of dogs that humans attempt to interpret through both scientific and critical understandings of the dog barks themselves (Pongrácz, Molnár & Miklósi 2010; Yin, S & McCowan 2004) and through gathering more general understandings of a dog’s emotional state based on various given cues such as barking (Bahlig-Pieren & Turner 1999; Buckland et al. 2014; Kerswell et al. 2009; Kobelt et al. 2007). There is however a growing understanding of the risk factors that drive nuisance barking in terms of its incidence and nature (Bragdon & Miller 1978; Cross, Rosenthal & Phillips 2009; Flint et al. 2013; Raglus, De Groef & Marston 2015), however there remains limited research into the regulation of barking dog nuisance more generally (Flint et al. (2014); with notable exceptions including Borthwick (2009), Huss (2005) and Instone and Mee (2011)).

Beyond nuisance barking, the public dog too creates regulatory traces that have undergone limited research (Brown, K 2014; Weston et al. 2014). There is interest in the need to regulate dogs within the confines of their effects on the natural environment (Lenth, Knight & Brennan 2008; Miller, S, Knight & Miller 2001; Schlacher et al. 2015) but also more general interest in understanding how dogs are managed and regulated in practice (Miller, R & Howell 2008; Tardona 2012; Weston et al. 2014), and the degree of compliance with those regulations (Rock et al. 2016; Rohlf et al. 2010; Toohey & Rock 2015; Williams, K et al. 2009). Ultimately the ‘animaling’ of the city of Instone and Sweeney (2014) questions the distinction of humans from animals and clarifies what responsible dog ownership might mean from a sociological perspective. My thesis adds to this discourse by providing an inward look at the planners and institutions which plan for dogs in practice, with questions of identity and agency framing much of the discussion in the chapters to come.

2.4 ‘Pets’ and ‘Companion animals’

Before proceeding to consider the foundations of justice for dogs in the next chapter, I pause to briefly consider and defend my conscious and careful decision to describe domesticated dogs as ‘pets’ throughout my thesis. The commonly used term ‘pet’ denotes a relationship of pleasure and affection, this often being associated by scholars with a dominant relationship or sense of ownership; in contrast, the more recent term ‘companion animal’ denotes a closer and more mutual relationship built on respect and understanding (Walsh, F 2009a). Irvine (2008, ch.3) too draws a strong distinction, observing a transition from pets to companion animals over time and highlighting fundamental ontological shifts, the developing sophistication of ethological research and advances in sociology as key drivers. Her delineation is essentially one of power and dignity, that ‘pets’ lack both in contrast to ‘companion animals’, implying a parallel dichotomy, that ‘pets’ lack their own purpose whereas ‘companion animals’ are capable of having their own purpose. In exercising that purpose, Haraway (2003, pp.11-4) describes ‘companion animals’ as being willing to join humans in family or service, despite having little say in the matter; willingness here is perhaps characterised as an open-mindedness on the part of the animal to accept and make best of their ‘lot in life’.

The scholarly treatment of terminology appears mixed. Some scholars draw out the distinction between ‘pet’ and ‘companion animal’ and formulate an argument to adopt

one or the other (e.g., Walsh and Irvine, and Borthwick (2009) in a legal context), or simply use one or the other without further argument (e.g., Serpell (1991, 1996) and Messent (1983) use ‘pet’, whereas Sanders, C (2003) predominantly uses ‘companion animal’ but contextualises and uses ‘pet’ in a similar characterisation to Walsh). Others still infer an interchangeability of the terms (e.g., Philo (1995) and Power (2008)) or simply use a mixture of terms in the course of their writing, perhaps with contextual nuance (e.g., Beck and Katcher (2003) and Wolch (1996)). More fundamentally, Shapiro (1990) takes issue with the word ‘companion’ and prefers the dichotomy of ‘pets’ to ‘animals’. Nevertheless, the broader community do not appear to distinguish the terms in practice, exemplified by the mixed use of terminology throughout the Australian Companion Animal Council’s (2010) report.

My thesis assumes the common vernacular of ‘pet’ to describe dogs as companion animals (with no disrespect intended in the sense of Irvine (2008, ch.3)). By attaching the term ‘pet’ to the domesticated dog, I am describing a common companion relationship, a common owned relationship and hinting at a subordination of a dog’s interests within their human-dog pack. This is not to imply that those (subordinated) interests of dogs do not deserve equal consideration by humans within institutions of justice, in fact in the chapters to come I argue the reverse, rather that the term ‘pet’ most accurately describes the companion relationships which humans typically have with their dogs within urban environments and is therefore appropriate to use in conceiving planning for dogs in practice.

3. FOUNDATIONS OF JUSTICE FOR DOGS

“The sphere of justice is the sphere of basic entitlements. When I say that the mistreatment of animals is unjust, I mean to say not only that it is wrong *of us* to treat them in that way, but also that they have a right, a moral entitlement, not to be treated in that way. It is unfair *to them*.”

- Martha Nussbaum (2006, p.337)

“All animals are equal. But some animals are more equal than others.”

- George Orwell’s *Animal Farm* (1987, p.90)

In his work *A Theory of Justice*, John Rawls (1999, pp.3-6) describes justice as a set of principles governing how people assign rights and duties and evaluate a fair distribution of benefits and burdens of society. The principles expressly forbid the imposition of injustice on some for the greater good of others. Principles of justice can vary between individuals however, making justice a concept defined at an institutional level rather than prescribed by an individual’s conception of justice. Rawls considers justice as “the fundamental charter of a well-ordered human association” (1999, p.5).

The institutional nature of justice appears to have achieved broad acceptance. Fainstein (2010, p.166) defines justice as maximising equity, diversity and democracy, a plural and normative definition (like Rawls’) in that we will never maximise all the variables for all individuals since maximising any one will involve a trade-off with another for someone else. This definition however is also congruent with Martha Nussbaum’s critical capabilities and her approach in general (Nussbaum 2011, pp.33-4) that has as its foundation capabilities mirroring those of Fainstein.

There is a moral imperative to understand how justice might apply to animals (Garner 2013, p.1). Philosophers commonly draw correspondence between human rights and civil rights as a familiar precursor to considering animal rights and, consequently, justice for animals (Whatmore 2002, p.148); abortion, euthanasia, slavery and disabled rights for instance each introduce parallel considerations in how humans act towards animals (Francione 2000, ch.4; Midgley 1998, ch.9; Nussbaum 2006, ch.6). These comparisons yield stark differences between the treatment of human interests and rights and those of animals, creating a licence to explore how justice applies to animals in practice.

Justice for animals regulates how humans act towards and interact with animals both inside the human realm and in the wild. In urban communities, the presence of domesticated animals is increasingly regulated, these controls managing the increasing contest of different users and activities (Donaldson & Kymlicka 2011, p.113; Instone & Sweeney 2014). Within these communities too live wild animals that call urban environments home: foxes, hares, possums, bats, and the like. The rights of these ‘liminal’ creatures fall through the cracks: they are considered pests – invisible, unowned and forgotten – and consequently lack positive consideration in typical animal rights and environmental protection regulatory frameworks (Donaldson & Kymlicka 2011, pp.210-1; McEwen 2011, ch.6; Ojalammi & Blomley 2015). Wild animals on the other hand fare somewhat better than their liminal cousins, although they mostly fall within the purview of general environmental protections rather than explicit animal management and regulation (Matheny 2006). Despite being mostly ‘out of sight, out of mind’, wild animals do generally fall under anti-cruelty and, specifically, culling controls and regulations. In Australia for example, humans control kangaroo and dingo populations through such regulations with an overarching goal of ecological sustainability (Boom et al. 2012). Nevertheless, wild animals are typically subject to regulation only when they encroach upon human existence (Francione 2000, pp.154-5; Garner 2013, p.100). In line with the remit of my broader thesis, my focus in this chapter is naturally on justice for domesticated dogs however, in approaching the subject of justice, I do need to consider the wider implications of justice for all species in the course of developing my argument.

In order to address the subject of justice for dogs, in section 3.1 I begin by exploring the range of interests and rights of animals framed through a critical but necessarily brief review of predominantly contemporary philosophical literature. Once this background is established, in section 3.2 I turn to focus on the special case of domesticated animals and explore the effects of ownership on the rights of animals. Normative models of ethics are introduced in section 3.3 as forming the theoretical basis for various frameworks of justice, these reflecting the different ways which the interests and rights of individuals are recognised in practice. Following these introductory topics, section 3.4 introduces the doctrine of Rawls, ‘justice as fairness’, a derivative of utilitarianism which attempts to blend together rights as interests of the collective whilst simultaneously attaching an importance to personal liberty. In contrast, section 3.5

introduces ‘justice as capabilities’ which recognises rights as capabilities, superseding both utility and interests and functioning broadly in discordance with Rawls’ fairness doctrine. Finally in section 3.6, the contrast between rights as interests and rights as capabilities provides a framework for a critical discussion on different ways in which justice is established in our society and consequently informs a potential justice for dogs.

3.1 Interests and rights of animals

In order to contemplate the question of whether we ought to extend justice to dogs and what that might mean in practice, it is important to establish the nature of animal interests and rights and, in particular, examine the special case of domesticated animals. In this section, I introduce animal interests and rights through a critical but necessarily limited survey of predominantly contemporary philosophical literature. In the forthcoming section 3.2, I narrow my focus to prominent issues affecting domesticated animals and their access to rights, notably examining the effect of property ownership on domesticated animals.

Animal interests

‘Speciesism’ is characterised as a prejudicial regard by humans for non-human species, similar in many ways to racism and sexism amongst humans (Ryder 2006; Singer 2009, p.6) and reflective of the intertwining of species identity with race and gender (Haraway 2008, p.18). Further, Eckersley (1998) describes such ‘human racism’ (her term for speciesism) as necessarily systematic and that it is natural and not speciesist for humans to have regard for their own welfare in life-or-death situations; in other words, under some circumstances prejudicial decisions can be ethically quarantined. Importantly, speciesism is both prejudicial and subjective as distinct from an objective classification of species commonly found in botany and zoology (such as the schema of Foucault (2002)); that is, not all classifications of species represent speciesism.

Speciesism is a recurring theme in some philosophies describing the human-animal frontier. Aristotelian philosophy decrees that humans and animals are separated by the ability to reason, be that absolutely or in degrees; as a consequence of this, a natural power hierarchy exists in nature with humans as supreme species having a right to use other, lesser species as a resource (Aristotle 2015c, Book 1: Part V; Singer 1985). Francione (2000, p.186) concludes that treating animals in this way by virtue that they

are of different species epitomises a brand of contemporary speciesism rife in Western culture.

According to Singer (2012), modern philosophers who subscribe to these kinds of speciesist perspectives are prone to define concepts such as the ‘intrinsic worth of humans’ when attempting to justify the existence and positioning of the human-animal frontier; ascribing such intrinsic worth to humans is the same as asking what attributes make us more special than animals. On the other hand, Eckersley (1998) describes the natural human tendency to favour human welfare over that of other species as arising from familiarity and empathy rather than (necessarily) a question of relative worth. Setting intentionality aside, Singer (2009, ch.1) is at pains to articulate why different considerations are not speciesism and grapples with the so-called ‘marginal (human) cases’ in positioning animal rights on a moral spectrum (see also section 3.6). Aside from the natural urge to take care of our own interests before those of other species, humans do not have distinguishing characteristics that warrant such notions of intrinsic worth (Francione 2000, ch.5). It then remains to understand what characteristics do differ between humans and other species and thus better understand what the human-animal frontier might look like in practice.

Humanity can be defined in terms of ‘animality plus X’, where ‘X’ represents those elements which are denied to animals, such as freedom, self-hood, rationality and reason (Calarco 2004, p.29). Karlsson (2012) splices ‘anthropocentrism’ into two kinds: embodied anthropocentrism as a tendency to anthropomorphise experiences outside of our species and value-theoretical anthropocentrism as ignoring the moral interest of other species. Anthropocentrism can underscore the inferiority of other species relative to humans (Johnston 2008) and is often interpreted as having an (excessive) interest in humans over other species rather than having a lack of interest in other species in and of themselves (Eckersley 1998). More comprehensively, Irvine (2008, ch.3) describes anthropomorphism as perhaps unavoidable since we can only understand other species through a language which we speak (similar to Karlsson’s embodied anthropocentrism) and she develops the notion of ‘animal capital’ to describe the anthropomorphic capacity of humans to develop bonds with animals.

At the extreme, Descartes (through logic) delineates animals from humans by their lack of ability to share discourse (Francione 2000, p.104). A lack of discourse is seen by

some philosophers to limit an individual's ability to comprehend their own worth, to have an interest in that worth and thus precluding them from having moral rights about those interests (Midgley 1998, pp.54-5). Claims that animals lack moral standing based on such reasoning are challenged by our contemporary 'moral institution' (Garner 2003) and the potential for mismatch between scientific objectivity and 'common sense' (Wemelsfelder 1985). Irrespective of whether animals are deemed to have capability of discourse, the question remains whether animals are rational or have reasoning capability in order to warrant such comprehension of their interests.

'Reasoning' is defined by Plato as "the silent debate of the soul with itself, and belief as the silent conclusion of this debate, or as silent affirmation and negation in the debate, or the silent answer to a question" (Sorabji 1993, p.10). That is to say, reasoning is an internal functioning to digest and interpret information gained from the senses. To be 'rational' is to be capable of reason to some extent (Stein, E 1996, p.2). Heidegger considers animal behaviour as inherently irrational, captivated and driven; the animal being completely unaware of itself (Calarco 2004, pp.23-6). There is a robust ontological foundation to the philosophy of Heidegger in the philosophies of Socrates and Aristotle. Socrates makes an important distinction between perception and rational thought, granting that both humans and animals are capable of perception, however in order to have rational thought they must be educated (Sorabji 1993, p.11). Aristotle similarly asserts that only humans and not animals or gods have rational capacity, animals on the one hand being of limited capability and gods lacking boundaries for rational thought (Nussbaum & Sen 1993, p.248); in illustration, Aristotle distinguishes between 'actions' (which animals and humans can both take) and 'beliefs' (which only rational beings, i.e. humans, can have) in explaining the apparent rational behaviour of a thirsty dog that decides to drink water (Sorabji 1993, pp.87-8), demoting actions of animals to be reliant on instinct rather than a system of independent thought. Furthermore, in articulating his theory of justice, Rawls (1999, p.374) commodifies the Aristotelian human-animal distinction, describing these apparent differences in capabilities themselves as a 'leading human good', a human virtue. The distinctions between perception and rational capability of Socrates and action and belief of Aristotle appear to demarcate humans from animals.

Midgley (1985, p.59) provides a possible explanation for Heidegger's ontology as arising from a time when humans were unaware of the intelligence of some animals,

particularly species of dolphin, whale and ape. Echoing this idea, Stoett (2005, p.161) remarks that we as humans are “little more than highly complex organisms at a particular moment in evolution”; our understanding of animals and the human-animal frontier clearly develops over time. Indeed, a body of contemporary philosophers share the view that the boundary between humans and animals is both real and important, however it is difficult to describe exactly where or what the boundary is (Francione 2000, p.125; Regan 1985, pp.22-3; Sorabji 1993, p.93). In a similar way, Wolch (1996) describes the human-animal frontier as ambiguous in the resemblance of animals to humans on the one hand and respecting their inherent ‘otherness’ on the other. These perspectives introduce the question as to which capabilities are exclusively animal and which are shared by human and animal.

Human capabilities are distinct but not necessarily superior to animal capabilities (Aristotle 2015a, Book I: Part 1 and Book IV: Part 8; Sorabji 1993, pp.90-2); indeed, humans too possess different capabilities from one another which define us as individuals but do not detract from our identity as human despite our different capability sets (Francione 2000, p.125; Regan 1985, p.22). Such considerations lead to questions of why the possession or absence of particular (human) potentialities might determine the limits of our ‘moral concern’ towards animals (Midgley 1985, p.60). There is however a more fundamental constraint that humans lack capability to go beyond sentience in considering the moral worth of animals through a tendency to ignore evidence of similarity between species and, even when we do consider such evidence, there is no agreed way to determine what similarities ought to be measured and how close is close enough to be considered similar (Francione 2000, pp.116-9).

The capacity to reason or the capacity to exhibit one or more human capabilities do not equate to having the capacity to possess interests. Bentham (2004, pp.310-1) considers the capacity to suffer and experience enjoyment as necessary to have the capacity to possess interests. Singer (2009, pp.7-8) takes this one step further, asserting the sufficiency of this capacity in order to have interests. By focusing on the capacity for suffering, the various points of departure between humans and animal capabilities are then subjects for equal consideration of treatment rather than forming criteria that exclude animal interests from having the right to be considered. Animal rights provide the means to articulate how these moral interests are accounted for both absolutely (in

legal terms) and relative to the interests of others (in moral terms). Justice then forms the model of how these rights are distributed in practice.

Animal rights

Jeremy Bentham brings morality and equality to the forefront of the human-animal debate. In his seminal work *Introduction to the Principles of Morals and Legislation*, he articulates a consideration of animals as positioned outside the scope of jurisprudence and subject to moral consideration only (Bentham 2004, pp.310-1). He outlines an argument that considers physical and mental characteristics as being insufficient justification to distinguish species; in other words, he asserts that the question of the human-animal frontier is a moral one. And morality brings with it sensitivity and emotion, and not questions of rationality rather questions of suffering.

Midgley (1998, ch.3) believes that emotion and rationality cannot be compartmentalised, even though philosophers may try. It is perfectly normal, even obligatory, to feel emotion when forming ideas on important subjects and suppression of emotion is perhaps largely from societal norms that emotions are unstable and not desirable commodities to have in philosophical crises. According to Midgley, priority questions between emotional or aesthetic values and values of other kinds need to be settled, and this settlement takes place using each individual's moral compass. 'Morality' is the set of scales to balance these values against one another which manifests in having moral interest in the welfare of others.

Singer (2012) defines the term 'equality' in terms of consideration of interests rather than rights. Equality describes a world where each individual's interests are given equal consideration, with no one individual's interests given a greater priority than another's. Bentham's philosophy is that the interest of (avoiding) suffering is the most fundamentally important interest and the basis for equality both within and across species (Bentham 2004, pp.310-1); the question of suffering overrides questions of mental or physical capability in defining the human-animal frontier. Haraway (2008, p.22) however argues that by focusing on the question of suffering, fundamental considerations of animals then focus on avoiding pity rather than encouraging joy; she argues that such a shift in focus might reorder our priorities in respect of animals. Once the priority question is established, animal rights then manifest in the impartial and equal consideration of interests (both positive and negative) within and between species

(Francione 2000, ch.4). Importantly however, this is not to imply that the interests of each individual are the same; rather, it is to say that interests of individuals are given equal consideration to the interests of others of any species.

‘Anthropomorphism’ is to attribute human characteristics to non-human beings, including but not limited to animals (Tyler 2009). Of the three strands of anthropomorphism – of physical form, of activities and attributes, and of intentionality, purpose and volition – Tyler finds the third to be the most common form in both science and philosophy, characterised by its ‘unthinking’ nature and apparent inevitability; indeed, Michael (2000, p.126) characterises such thinking as ‘sentimental’, at least to the degree where humans perhaps take it too far. In response to this tendency, Dawkins (1985, p.38) argues that we have to develop some informed understanding of what it is like to be the animal (from inside *their* skin) rather than simply speculate what we think the animal is experiencing (from inside *our* skin). In other words, what we as humans find pleasant or unpleasant is not necessarily the same for another species; nevertheless, Francione (2000, p.6) describes our inability to know precisely what other members of our own species experience.

Whether or not animals suffer remains a matter of human judgement and inference. Rolston (1998) delineates culture from nature, arguing that Bentham’s posit ‘can they suffer?’ is not straightforward since suffering is affected by cultural norms and natural interplay of different species within the broader ecosystem. Under the cloak of anthropomorphism, Emmanuel Levinas (2004, p.50) argues that humans owe animals an ethical obligation to minimise needless suffering since “we, as human, know what suffering is [so] that we can have this obligation”; that is, our knowledge of what suffering is apparently leads to an ethical obligation. Passmore (1975) describes this obligation in terms of maltreatment and callousness, whereby humans ought to not intentionally maltreat animals but it is morally acceptable to act callously should it serve a human need. In this way, cultural norms rather than ecological arguments appear to drive the interpretation of (Bentham’s) suffering in the context of domesticated animals.

More fundamentally, Francione (2000, ch.6) acknowledges that Bentham’s (and Singer’s) philosophy respects the interest of avoiding suffering but critically lacks recognition of an individual’s desire to continue to exist. This construct permits the use of animals as resources or food on the basis that they do not suffer as a result. The

experience of suffering and existing are treated separately, ignoring any capacity of animals to appreciate that their own situation is improving or declining and act accordingly, in turn denying animals equal consideration to humans who have an arguably similar comprehension of their own existence (2000, pp.98-100).

Not all conceptions of animal rights are equal however. There are two distinct kinds of animal rights theories to consider: those which argue that animals are entitled to inviolable rights and those which do not specify such entitlement (Donaldson & Kymlicka 2011, ch.2). Inviolable rights epitomise the undertaking that “an individual’s most basic interests cannot be sacrificed for the greater good of others” (2011, p.19). Such a notion of universal rights for individuals (be they humans or other species) runs counter to utilitarianism (see section 3.3) since the right to exist is arguably an individual’s most basic interest over and above the collective good in normal circumstances (however, life-and-death situations lead to more perverse outcomes (2011, p.42); these are not considered further here). In considering the egalitarian view across different species commonly adopted by animal rights proponents, Garner (2013, p.121) describes their arguments as problematic in elevating the rights of animals to the absolute detriment of the rights of humans to flourish.

Alongside arguments for consideration of the moral interests of animals, animals also feature as legal interests in their own right. Donaldson and Kymlicka (2011, p.21) assign animals certain legal status depending on their relationship with human society: the authors confer citizenship to domesticated animals, sovereignty to wild animals and denizenship to liminal animals (see also Chapter 4). These statuses establish different rights for animals and translate into their legal standing within society. Animal rights’ activists do not advocate for such recognition of domesticated animals on the curious basis that by formalising the inclusion of domesticated animals within the legal system, their lack of capabilities relative to humans is crystallised and codified (Donaldson & Kymlicka 2011, pp.101-2). In other words, respecting an animal’s moral rights is sufficient and ample consideration for us to afford their interests equal consideration; if such moral rights are respected, then the need for legal rights is lessened.

Private ownership is one particular legal standing in society. The perception of private ownership of the environment needs to be understood within the context of contemporary notions of environmental stewardship (Beatley 1989). Territories

created by humans continue to demark wild nature from the human world, in doing so demonstrating our choice to produce nature through some legal construction around property and ownership (Ojalammii & Blomley 2015). These notions of ownership, resource usage and management clearly continue to extend to domesticated animals – we ‘own’ dogs after all – leading to an examination of domesticated animals and how their interests and rights emerge as a special case of the broader consideration of the status of animals in society.

3.2 The special case of domesticated animals

Historically considered the consequence of human actions, ‘domestication’ is commonly understood nowadays as a process of joint agency over centuries between animals and humans (Donaldson & Kymlicka 2011, p.85; Haraway 2003, pp.26-32; Morey 2010, p.67). Earlier in Chapter 2, I introduced domestication in the context of its broad welfare implications for dogs. In this section, I will continue that discussion and briefly consider some fundamental implications of the process of domestication on the interests and rights of animals. Kymlicka and Donaldson (2014b, p.204) ask the poignant question – to “what do we owe to animals whom we have brought into our society as a domesticated caste” – a question which this section endeavours to explore in the context of interests and rights.

Along with other animals which humans use as resources, most notably as experimental subjects, livestock and working animals, domesticated animals can be classified as property and our relationships and values can be described by that ownership (Francione 2000, ch.3). Many philosophies perceive animals as resources for human use. Stoicism and Epicureanism decree that animals lack reason and are essentially means to human ends (Sorabji 1993, p.2). In a similar way, Kantian beliefs treat humans as ends in and of themselves and it is from this human life draws its meaning (Jamieson & Regan 1985, p.104); according to Kantian beliefs, other species lack substantial meaning to humans and are simply ‘things’ as dichotomous to ‘humans’ (Midgley 1998, p.112). These philosophies remain in common use in our characterisation of animals as ‘things’ to which we ascribe a value and treat as we would a piece of property (Francione 2000, ch.3); this is particularly important to consider with the ownership of domesticated animals.

The treatment of animals as property denies to some extent consideration of their interests in taking actions and making decisions. Francione (2000, pp.54-6) introduces the 'humane treatment principle', a framework designed to balance the interests of humans and those of animals; however the interests of humans will always usurp the interests of animals so long as humans are thought of as owning animals as property. On the other hand, regulating the prevention of cruelty to animals fails according to Francione because of the systematic treatment of animals as property; any such regulation typically controls rather than prevents actions of humans that may detrimentally affect the interests of animals.

Garner (2013, pp.88-92) fundamentally disagrees with Francione's argument, however. Garner contends that animals inherently benefit from the protection afforded by having some form of anti-cruelty regulation in place despite society's routine use (exploitation) of animals for human uses (we are not all vegans, after all); the property status of animals does not form a part of Garner's argument. There remains a moral schism between anti-cruelty regulation on the one hand and the use of animals to serve human needs on the other which remains unresolved and ultimately impedes the effectiveness of anti-cruelty regulation and animal welfare outcomes more broadly.

Looking to the context of the law more broadly however, animals are not property in the ordinary sense of the word according to Fudge (2000); rather, they are essentially afforded a character, blurring the demarcation between animal and owner. She characterises humans as having the capacity to be culpable under English law and animals as not, however considers their treatment under law as more nuanced than simply being considered a piece of property. Feinberg (2013, p.374) similarly describes individual animals as more than 'things', capable of being provided with rights and capable of suffering the denial of rights. Domesticated animals are more than just property of course, they are our companions. Haraway (2008) describes companion animals as 'messmates', a descriptor which embodies closeness and affection tempered with an organic disorder. She speaks of species as each having potential to companion with another species of their choosing. Whereas a wild wolf can choose with whom he or she calls their messmate, I argue that domesticated animals lack this choice by their owned nature; they are conditioned to be our companions, a more orderly acquaintance than a wolf messmate.

The companion animal relationship for domesticated animals is a decidedly one-sided affair: humans choose to make companions of particular species or individuals (Irvine 2008, p.28). This begs the question of whether domesticated animals would be better off outside of the companion relationship. Kymlicka and Donaldson (2014b) examine the case of a ‘partial exit’ from domestication as a means to test what opportunities a domesticated animal might have to obtain various liberties. The authors ponder the same questions of authenticity as raised by other contemporary philosophers (see section 3.1 and my discussions of Dawkins and Midgley in particular) and appear to conclude that the nature of freedoms without domestication largely depends on the importance and extent of human social ties to an individual animal. The status of domesticated animals as property does not appear to come under consideration in relation to freedoms in this model; rather, the nature of those freedoms resolves to the strength of human social ties and how important that reciprocal companionship is to them. In Haraway’s (2008) vernacular, the decision to stay domesticated depends on whether the animal would choose their human companion as their ‘messmate’.

At the beginning of this chapter, I argued that justice for animals regulates the actions of humans in controlling what actions they take and tolerate in relation to their owned animals and other species more generally. I used this to reason why there is a lack of interference of justice afforded to wild animals in comparison to their domesticated counterparts. Whilst I maintain this is the case, perhaps it is the lack of agency of wild animals in justice which is the defining factor; in the case of wild animals, only humans have agency of justice. Kymlicka and Donaldson (2014b) speak about domesticated dogs having responsibility for their actions as they learn how to become ‘good citizens’, behaving in a way that conforms to (the human) community expectations. In contrast to wild animals, domesticated animals appear to have a ‘citizenship’ that is defined by a joint agency between both dogs and humans; the arguments of Laurier, Maze and Lundin (2006) – to which Kymlicka and Donaldson refer – in fact describe a shared responsibility between domesticated dogs and their human companions. Such a shared responsibility naturally aligns with the joint agency of domestication. It appears that the agency of domesticated animals as ‘citizens’ affords them both rights and duties of justice.

In the remainder of this chapter, I focus on models of justice which describe how rights are distributed when considering domesticated animals as subjects of justice. In section

3.3, I describe normative models of ethics as a precursor to a critical discussion of justice for animals leading to a justice for dogs, forming the remainder of this chapter. Following this discussion, in Chapter 4 I turn to explore duties through the lens of the agency, identity and urban citizenship of dogs.

3.3 Normative models of ethics

According to Raz (1986, p.180), the “specific role of rights in practical thinking is... the grounding of duties in the interests of other beings”. Normative models of ethics reflect how the interests and rights of individuals are recognised in practice and form the theoretical bases for various conceptions of justice. This section begins with an overview of utilitarianism, a centrally important normative ethic that is described by Nussbaum (2006, p.338) as contributing “more than any other ethical theory to the recognition of animal suffering as an evil”, underscoring the importance of its contribution to a potential justice for animals. I then briefly position utilitarianism alongside deontological models of ethics, establishing a basis to critically examine and contrast two models of justice in forthcoming sections.

Utilitarianism as a science concerns how an individual’s interests are taken into account when making decisions. Mill (2001, ch.2) describes utilitarianism as akin to the ‘greatest happiness principle’ to guide our decision-making; in his earlier account, Bentham (2004, pp.1-2) takes this a step further, linking humankind’s “two sovereign masters, *pain* and *pleasure*” to the “hands of reason and of law”. Utilitarianism is based on consequences rather than rules and unsurprisingly forms a derivative basis for some prominent theories of justice.

Whereas the concept of utility can apply to an individual, utilitarianism as an ethic focuses on the ‘greater good’ of the community as its ultimate objective, generally superseding an individual’s happiness should that be in conflict with what is ‘best’ for the community (Bentham 2004, ch.1; Mill 2001, ch.2). Utilitarianism is further articulated by Matheny (2006, pp.14-5) through four pillars representing universalism (equality of interests), welfarism (ethical impact of action), consequentialism (legal and moral impact of action), and aggregation (prioritising community outcomes). Despite this focus on the community good, contemporary philosophers lack agreement on precisely what such a good ought to be (Singer 2012), underscoring utilitarianism as a deeply normative ethic.

Mill (2001, ch.2) argues that humans have the potential for deeper and more meaningful happiness due to their greater faculties and consequentially a lower reliance on instinct when making decisions; however, this depth and individual meaning coupled with a lack of agreed rules to determine the ‘greater good’ of the community in any consistent way makes it difficult to consistently apply the ‘greatest happiness principle’ for the betterment of the community as a whole. Through his example of the fool and the pig, Mill illustrates the difference between reasoning and instinct as whether one is aware of both individual and community goods (reasoning) or unaware of the community good (instinct).

Aristotle, Socrates and Heidegger share the view that animals have lower faculties and lack the reasoning capacity of humans, consequently relying more on instinct (Aristotle 2015b, Book 1: Part 1; Calarco 2004, pp.23-6; Sorabji 1993, p.11); the delineation between humans and animals in the context of developing a community good is greatly nuanced however. Mill (2001, p.12) introduces utilitarianism as governed by “the rules and precepts for human conduct”, asserting that the benefits of utilitarianism should be secured for all humans as a priority and then, “so far as the nature of things admits”, it ought to apply to sentient animals. How sentience then affects the ethic afforded to animals remains for discussion.

‘Sentience’ is defined as the capability of feeling pleasure and pain and the possession of interests which ought to be taken into account when making decisions (Garner 2013, pp.123-4; Matheny 2006, p.17). In section 3.1, a variety of philosophical positions describing the consideration of interests and rights of animals were introduced. Contemporary normative models of ethics position the rights of sentient animals on a spectrum: from the absolute protection of rights to life and liberty (e.g., species-egalitarian, protectionist, abolitionist) to the relative dismissal of rights in favour of rights of humans in particular circumstances (e.g., utilitarianism, the capabilities approach) (Garner 2013, pp.14-5; Stoett 2005). Curiously, much debate on animal rights seems to concern the negotiation of the controversial political landscape rather than the actual impact of particular practices on the welfare of the animals themselves (Garner 2013, ch.8); that is, it seems that granting rights to animals reduces or is perceived to reduce some other rights of humans and the controversy this introduces essentially forms the basis for much of the popular animal rights discourse.

Utilitarianism clearly introduces ethical dilemmas in how we treat animals, highlighting issues of deep political division in the community and consequently introducing difficulties in making pure utilitarian arguments; in the case of the rights of animals, there are a variety of issues to consider. Clearly, there are less controversial points upon which the community can more-or-less reach some consensus, such as agreeing that it is wrong for humans to harm animals for no other purpose than to inflict pain (Francione 2000, pp.xxii-xxiii; Garner 2013, p.64). Utilitarianism introduces moral dilemmas as the community struggle to reconcile their 'greater good' and the condemnation of the use of animals becomes more debatable.

Francione (2000, chs.1-2) asserts that food, hunting, entertainment and fur account for most uses of animals and counter-arguments against such uses can be formulated relatively straightforwardly (whether they are accepted by society is another matter). There are however uses that are less easily dismissed, these being medical and scientific use, product testing and education, which introduce moral dilemmas regarding what uses are necessary and thus allowable 'for the greater good'. Wild animals suffer from indirect harms as well with the destruction of their habitat for human ends, including the establishment of human settlements and farms, affecting their claims of sovereignty over their land and their potential to flourish (Donaldson & Kymlicka 2011, pp.156-7; Matheny 2006). These examples lead into a brief discussion on morals and ethics in utilitarianism.

Rolston (1998) describes the human species as evolving as omnivores and that the practice of eating meat is a part of our belonging to nature. Meat consumption may nevertheless be described as something imbued by culture and an activity driven by pleasure and utilitarianism; indeed according to Francione (2000, p.9), this activity forms the largest direct cause of animal abuse in North America. There is no physiological need for humans to consume animals and consequently a wider definition of utilitarianism guides us towards not eating animals or products of animals (Matheny 2006, p.21), yet we still commonly consider it our cultural right to kill animals for food. Moreover, some species suffer further indignity by not being recognised by some vegetarians as animals worthy of protection from consumption (most notably fish) (Philo & Wilbert 2000), the authors alluding to some humans implicitly placing the interests of different species within a hierarchy of importance. The production of meat for consumption also leads to mass destruction of natural habitats to make way for

farms and factories (Wolch 1996); the acts of animal slaughter undertaken in these farms and factories are ‘conveniently’ (if not purposefully) masked from the consumer, making an informed decision much more difficult (Garner 2003). In other words, the utility gained by the community from the consumption of meat exceeds the utility the community loses from (usually somebody else) killing the animal.

Medical experimentation using animals on the other hand introduces an ethical conundrum: the need for such research may be entirely necessary for the ‘greater good’, indeed there may be inviolable evidence of such benefits, however we choose to inflict harm on animals rather than using subjects from our own species (Donaldson & Kymlicka 2011, pp.43-4). Utilitarianism could justify such animal experiments if the benefits to humans were large enough (Matheny 2006, pp.22-3).

These two examples imply that disutility in particular is quite sensitive to the proximity of the individual to the activity which causes the negative outcome. In western society, most people that eat meat are not involved in the act of killing the animal. Blecha and Davis (2014) find people situate on a physical proximity spectrum in relation to animal slaughter: some prefer slaughter to take place outside of their community (‘out of sight, out of mind’), whereas others prefer slaughter in their community to ensure that animal welfare practices are observed (whether they have control of those practices is another matter). Attitudes towards animal experimentation in medical research appear to similarly vary by proximity: the more that an individual knows about the experimentation, whether that be through positive or negative messages or images, the less they support the use of animals in medical experiments (Nabi 1998).

In contrast, the success of some charity organisations seems to imply that people gain comfort (utility) from helping others whom they have never met and likely never will. That is to say, proximity does not have as significant an impact on positive utility whereas disutility depletes at a much faster rate than (positive) utility, according broadly with Waldron (2003) which examines the relationship between proximity and the ability to help or harm. Tassy et al. (2013) suggests that disutility is also quite sensitive to the social (or affective) proximity of the individual to the victim of a negative activity through an examination of the correlation between an individual’s judgement and the decisions which they make when faced with a moral crisis, concluding that “decisions are generally less utilitarian when potential victims are more affectively related to them”

(2013, p.5) when faced with a moral decision. Thus the proximity of the individual to both the victim and the carrying-out of the activity itself affect what decisions an individual makes and whether they maximise utility through their choice of action.

Similar to utilitarianism, deontological ethics consider how interests ought to be considered and rights distributed as a precursor to a theory of justice. Hursthouse (1999, ch.1) positions utilitarianism and deontological approaches to ethics on a spectrum: the utilitarian is motivated by the consequences of their actions whereas the deontologist is motivated by duties of compliance with an established set of ethical rules and principles. The consequences for the utilitarian and the rules for the deontologist vary between individuals and the subjects of their moral concern; there is no single set of duties which define an approach to a deontological ethic. Care ethics is a particular deontological ethic which relies on our duty as a species to care and emphasises feminist notions of emotion over the masculine notions of rationality in defining our duty to other species (Garner 2013, pp.53-7). Virtue ethics is similar but frames the object of duty as virtue and vice (Hursthouse 1999, ch.1). In circumstances where we have less certainty of the (longer term) desired outcome but more certainty over the piecemeal steps to take in the shorter term, a deontological approach may prove more effective than utilitarianism; as an example, Martin, Akol and Gross-Camp (2015) argue that such an approach is more effective in tackling questions of sustainability.

Indirect duties on the other hand introduce a discipline that forces the consideration of human interests to permeate decisions regarding the utilitarian outcome for animals, blending utilitarian and deontological approaches. Through a critical review of deontological literature, Garner (2013, ch.4) argues that indirect duties distinctly differentiate between domestic animals and those in the wild: with a domestic animal, our 'duty' is to protect that individual animal from harm; however, with a wild animal, our 'duty' shifts and does not protect any individual animal rather an entire species. Rolston (1998) delineates these duties by culture and biology: our duties to domestic animals are inspired by their cultural status as 'human artefacts'; whereas our duties to wild animals are inspired by their biological status as superior in interest to any individual member of their species.

Indirect duties too may provide some insights into the effectiveness of animal cruelty regulation. Animal cruelty regulation in practice is heavily affected by the routine use

of animals to service human needs (see section 3.2). If we are protecting an individual animal from harm, be they a domesticated animal, livestock or a laboratory specimen, we ostensibly have that relationship with that individual borne from our use of that animal, confounding the effectiveness of animal cruelty regulation which agitates against human needs. If we are protecting an entire species from harm in the wild, we do not have any relationship or use for an individual, rather we wish for the collective to flourish; using similar arguments, Feinberg (2013, p.375) draws a direct comparison between the protection of entire species and the protection of plants (see section 3.6). Based on this brief argument, it appears that animal cruelty regulation shows more promise in protecting wild animals than domesticated animals and hence underscoring the importance of having domestic animals regulation in its own right.

There is clearly a role for utilitarian and deontological ethics in formulating models of justice for animals. Having established the boundaries of humanity's moral concern for animals, the remainder of this chapter explores the concept of justice as it might apply to animals. In his work *The Idea of Justice*, Amartya Sen (2009, pp.376-9) asks a critical question of whether rights are motivated by interests or freedoms; accordingly, Sen proposes that we should consider rights as opposing dualities of 'interests' and 'satisfaction' to 'freedoms' and 'opportunities'. This contrast between rights as interests and rights as capabilities forms a basis to explore the concept of justice for dogs.

3.4 'Justice as fairness': the ideas of John Rawls

John Rawls advances his contractual theory on justice that is "about the most influential theory of justice in modern moral philosophy" (Sen 2009, p.59). Rawls himself has claimed his theory as being different from, yet strongly aligned in principle with, utilitarianism (Sen 2009, p.70). This section begins by exploring the various points of departure of Rawls' theory of justice from its utilitarian foundations.

Rawls' two main problems with utilitarianism are its focus on normalising and aggregating welfare decisions across an entire community (Cohen 1993, p.9). In contrast to vanilla utilitarianism, the approach Rawls takes to justice essentially substitutes welfare for primary goods (which Rawls (1999, p.54) defines as "things that every rational man is presumed to want") but leaves almost everything else unchanged. This changes what is being distributed (regulated), but does not address the concern of

normalisation and aggregation precisely. Rawls makes the assumption that the goods are what *every man* would want, which normalises and aggregates just the same.

Rawls' conceptualisation of 'justice as fairness' is based on the existence of a social contract of mutual advantage. Rawls' (1999, p.53) two main principles of justice are:

- firstly, "each person is to have an equal right to the most extensive scheme of equal basic liberties compatible with a similar scheme of liberties for others"; and
- secondly, "social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage, and (b) attached to positions and offices open to all".

These two main principles of Rawls' 'justice as fairness' govern how rights and duties are assigned and how social and economic advantages are regulated in society. Justice is society's control mechanism and the institutions of justice are where that control resides. Just outcomes are based on the collective assignment and regulation decisions of institutions; as such, they remain both highly aggregative and impersonal. Personal liberty is given priority in Rawls' justice through his focus on primary goods as interests and he uses differences in allocations to determine the opportunities which people face and resolve any injustice through adjusting and normalising expectations across society (the difference principle: Rawls (1999, pp.65-73)). Rawls' approach is therefore positioned as broadly utilitarian but deeply respectful of the basic freedom of personal liberty.

The 'original position' is a hypothetical environment of Rawls' where rational individuals adopt a 'veil of ignorance' as to their own particular 'endowments' (Rowlands 1997, pp.236-7), with this simulated lack of information acting as an impartial arbiter of individual ambition and desire, leading to a conception of equality. Rawls describes equality in the context of his original position as applying to "human beings as moral persons, as creatures having a conception of their good and capable of a sense of justice" (Rawls 1999, p.17) with 'moral personhood' being "a potentiality that is normally realised in due course" (1999, p.442). If a human being is or has potential to be a moral person, Rawls (1999, p.442) states this is a sufficient but not necessarily required condition (in the sense of Mahoney (2003, p.341)) to be entitled to justice.

Rawls does insist on a minimum moral potentiality and however low this bar is set, it will exclude some human beings that lack the most basic moral abilities from being afforded justice (Garner 2012). Rawls describes this as a (natural) disadvantage that limits a person's liberty (Rawls 1999, p.443), with fairness extending only to the threshold of morality and no further. Rawls' later statement that "the minimum capacity for the sense of justice insures that everyone has equal rights" is based on a generalisation and not a focus on what he calls 'arbitrary contingencies' (abnormalities) (1999, p.446).

Nussbaum highlights that Rawls' original position omits some humans, particularly those of chronic disability that lack potential of ever having sufficient understanding of morality, and sentient (and non-sentient) animals (Nussbaum 2011, pp.86-7). In particular, Rowlands (1997) is critical of the rationality constraint (i.e., minimum moral potentiality) imposed by Rawls to furnish an individual with an entitlement to justice. Rowlands' argument considers rationality, like gender and race, as an endowment of nature and outside individual control, thus something cloaked by the 'veil of ignorance' in the original position. A similar argument is put forward regarding the restriction of justice to humans, with Rowlands concluding that the endowment of species is also part of nature and outside of individual control. Rowlands describes both rationality and species as both 'morally arbitrary' properties that ought not to determine whether that individual is entitled to justice.

Garner (2003) on the other hand considers that relaxing the minimum moral potentiality of Rawls (thus making way for animals) leads to a moral contradiction: either humans suffer from less moral freedom or animals suffer from being excluded from justice. Given that this decision is 'a conception of the good', Garner (2012) argues that it is only 'logical' that state intervention is inappropriate, hence provision of justice to animals is inconsistent with preserving moral freedoms of humans. Rawls (1999, p.69) conversely suggests that his difference principle can "authorise changes that may lower the expectations of some of those better off" to alleviate any injustice in the basic structure, thereby potentially admitting animals into the fold of justice at some expense to the moral freedoms of humans (i.e., the better off). Rowlands (1997) takes the argument a further step, questioning why this minimum moral potentiality constraint is important in the first place to the question of entitlement to justice.

Garner (2012) points out that there are typically two ways which philosophers have tried to incorporate animals into Rawlsian justice, either through human agency or by expanding the scope of Rawls' original position to incorporate ignorance of species. Garner holds a strong view that Rawls never intended for his conception of justice to include animals within its scope, rather that the treatment of animals (not justice) to be regulated through "a broader moral arena" (2012, p.162). Indeed, this is the main rationale which Garner uses to reject Rowlands' broader interpretation of the original position. Garner's arguments are brought into question following his admission that, in fact, "we cannot know that Rawls did take the moral worth of animals seriously, and we cannot know that he regarded the duties of morality as 'greater than, and different from' those of justice" (2012, p.163). In other words, we cannot read into Rawls' intentions without applying our own mental projection of what we think those intentions actually were.

In contrast, Rowlands (1997) interprets Rawls' silence on whether moral personhood is a requirement for justice as leaving open the question of justice for animals, substantially watering down Garner's criticisms of Rowlands' argument. Garner argues that Rawls clearly intended to exclude animals from justice but he is unsure what Rawls' intentions were in regards to an animal's entitlement to have moral standing. In either case, this appears to leave open the possibility of animals having a moral entitlement of their own within Rawls' theory of justice, despite Garner's interpretation that Rawls never intended for animals to be subject to direct justice. It is clear that consensus on the nature and importance of moral standing of animals in Rawlsian justice is lacking. In order to determine how Rawlsian justice might be modified to inform a potential justice for animals, it appears that we first need to understand to what extent humans and animals are different and then what moral capacity is sufficient or required for an entitlement to justice.

A concern with Rawls' approach and his application of 'the difference principle' is that not every participant, when given the same allocation and expectation of primary goods, is able to realise that allocation to its full potential. The freedoms and capabilities of individuals differ with any given allocation of primary goods and to an extent are independent of such allocation, suggesting that recognising freedoms and capabilities is ultimately more worthwhile when evaluating justice (Sen 2009, pp.65-6). The prominence of personal liberty above all else in forming the just institutions is

congruent with the Capabilities Approach and is perhaps the key connection between Rawls' 'justice as fairness' and a 'justice as capabilities', an alternative approach to justice that is founded on freedoms rather than interests and is the subject of the next section.

3.5 'Justice as capabilities': the ideas of Amartya Sen and Martha Nussbaum

In his philosophy of justice, Sen (2009, p.363) ranks human rights above any established legislative structures. If we live in a just society, then the laws ought to respect our basic human rights and thus it follows that any fundamental consideration of law must be preceded by a consideration of basic human rights. Legislation is one possible approach to ensuring basic human rights reach those in society (2009, pp.364-6). However the compulsion of an individual to take a particular course of action in the interests of others, of their own species or another, need not be motivated by any legislative or cultural prescription.

Within the confines of what is legal in a particular jurisdiction, individuals are intrinsically free to make their own choices with the caveat that our preferences are already developing during our infancy, before we are ever aware of our actions and their consequences (Nussbaum 2011, pp.50-6). Consequently, we are conditioned to behave in a certain way that depends largely on uncontrollable factors ranging from the pervading culture in society and our own 'lot in life' which we find ourselves in. This plurality of conditions implies that there exists no universal set of human rights which emphatically lead to our structure of justice; rather, justice is an amalgam of society's views as to what is right at a particular point in time. And certainly there is no universal set of rights which humans ascribe to any other species.

According to one meaning within the *Concise Oxford Dictionary* (1995), 'freedom' is "the state of being free to act". In this definition, 'state' defines a potential, opportunity, capability or readiness. Individuals within each species have their own set of capabilities which are important to their living dignified and worthwhile lives. Freedom in this sense is having access to substantive opportunities to function and flourish within the scope of their species and their own individual abilities (Nussbaum 2006, pp.360-5; Sen 2009, p.295).

Freedom is also a state of being free, of having access to choice (Sen 2009, pp.228-9). No action is respectful if it denies another some freedom to choose what they want to do (Nussbaum 2006, p.378) and sometimes the freedoms sought by particular individuals or species help them flourish to the detriment of humans. According to Francione (2000, ch.1), human acts like keeping chickens in battery cages, sows in farrowing stalls or cows in small enclosures is undignified and disrespectful to the animal. Dog fighting introduces a curious extension of this argument, since barring particular dog breeds that were ‘born to fight’ – perhaps most notably pit bull terriers but others too – from fighting other dogs who are suitable sparring partners is likewise denying them the right to flourish to their innate capacity (Werkheiser 2015). There is nevertheless no reason why we should possibly know what is always best for another species, particularly those found in the wild, but if we are observant we may stand to learn something about what they choose to do in order to act towards them more respectfully in the future (Fulfer 2013; Nussbaum 2006, p.371). Humans are an incredibly powerful species and we need to exercise that power with prudence (Sen 2009, p.207); in other words, a greater altruism in how humans think and act towards other species ought to lead society towards a better justice for other species.

The Capabilities Approach is a contemporary model for rights as freedoms. The Capabilities Approach was pioneered by Amartya Sen and Martha Nussbaum (among others) and assumes that future capabilities supersede current welfare, where a finite but subjective list of central capabilities can be formulated as a basis for a worthwhile and dignified existence of the human species (Nussbaum 2011, p.27). The central capability set provided by Nussbaum consists of ten freedoms which she considers ought to be preserved at all costs (see Table 7 on page 104). A minimum threshold of capability is needed in each of these areas to ensure that no one central capability is sacrificed for the achievement of others (Nussbaum 2011, pp.36-7), underscoring the importance of the existence of a list over and above any argument over its constituency.

Equality of access to fundamental opportunities (freedoms) is paramount in the Capabilities Approach. This differs from any prescription of an absolute equality of rights themselves. Indeed, not all freedoms will be equal in a just society: some will be more important than others (Sen 2009, p.295), contrasting with Rawls’ account of justice which argues that those worse off in a just society deserve greater priority in accessing resources (Rawls 1999, p.86). In Rawls’ postulate, achieving equality in

interests (satisfaction) supersedes the smoothing of any disparities in opportunity (freedoms). The nature of equality, be it opportunities or interests, is a key delimiter between the two approaches to rights.

In terms of function, the Capabilities Approach is built around a premise that important functionings cannot be substituted by the acquisition of primary goods, units of happiness or utility (Kynch & Sen 1983; Sen 1985). The purpose of the list of central capabilities is to encourage people to think in terms of freedoms and capabilities when making decisions that honour and dignify the individual (Nussbaum 2011, pp.26, 77-8); such a focus is inherently individual and non-institutional.

In terms of opportunity, interests-based approaches focus on satisfaction in the present (see section 3.4) whereas capabilities indicate opportunities for freedom to exist in the future and can lead to important functionings where those freedoms are realised by individuals in the pursuit of well-being (Nussbaum 2011, p.25; Sen 1985). Ideally, the central capability set existing today ought to be available tomorrow (Nussbaum 2011, p.145); in practice however, such security of capability is difficult to achieve without ceding at least some control to state institutions (Nussbaum 2011, pp.63-4; Wolff & de-Shalit 2007, p.40), leading to trade-offs between central freedoms in order to gain overall capability security. In the Capabilities Approach a role must therefore exist for institutions and state to ensure that their citizens can have access to minimum capabilities to enable them to flourish if they so choose (Nussbaum 2011, p.125).

Sen (2009, p.233) describes the Capabilities Approach as no longer focusing on the means of living as in some conventional models of justice based on interests (such as 'justice as fairness'), instead focusing on the actual opportunities of living and freedom of choice. This choice includes the opportunity to afford the capabilities of other species recognition in models of rights and justice if we so choose.

To this end, Sen has a particular focus on agency freedom in his variation of the Capabilities Approach (Crocker & Robeyns 2010, pp.75-84; Sen 1985). Agency freedom is tied to the individual's desire to achieve certain freedoms for themselves or others and is not specifically tied to a particular central capability. In order to have agency, an individual must meet four criteria. Firstly, they must themselves make the decision to take action (self-determination); secondly, they must have reasons and deliberate to an extent, precluding impulsive action (reasoning and deliberation);

thirdly, they must take the action which they decided upon (performative); and fourthly, they must have an impact on the world around them, however small (Crocker & Robeyns 2010, pp.80-2). Humans act as the representatives of animals in any justice system, thus agency freedom is of particular importance when considering justice for animals; agency freedom is discussed in the context of developing the idea of an urban citizenship for dogs in Chapter 4.

The Capabilities Approach is asking people to consider values and ethics when making decisions (Nussbaum 2011, pp.77-8). In contrast to Sen's agency freedoms, Nussbaum (2011, p.18) pays particular attention to the capabilities of non-human animals in her variation of the Capabilities Approach. She introduces a 'scale of concern' from humanism to ecocentrism and, in her narrative, claims that society could move a little more towards a middle ground which acknowledges the capabilities of sentient creatures (2011, pp.157-8). Just as some countries in contemporary times are ill-resourced or otherwise unable to immediately provide adequate opportunities to their (human) citizens in all central areas, recognising the capabilities of animals may take some time.

There are critics who disclaim the suitability of Nussbaum's (and presumably Sen's) Capabilities Approach as a model for justice for animals. Foremost, there are fundamental objections that human agents are incapable of describing the quality of existence of other species and humans ought to use their own desires as a proxy for understanding the capability set of animals (Mendola 2014, p.158). And even if humans do in fact have the capacity to determine a capability set for other species, then we can fall into a trap of making invalid prioritisation decisions; Garner (2013, pp.112-6) contends that Nussbaum regards humans as morally superior to animals, granting preferential treatment to a human's right to flourish over an animal's when faced with tragic choices, making the Capabilities Approach as a model of justice for animals derivative at best or inconsistent at worst. Moreover, Smith (2008, p.205) criticises the Capabilities Approach as being "far too inclusive to serve as a workable theory of justice". Nussbaum (2011, p.182) nevertheless seems aware of these kinds of criticism, determining that political liberalism requires metaphysical, epistemological and psychological discipline to ensure the diversity of human views are respected in reaching any controversial consensus on the rights of animals. Reaching such consensus will clearly be a slow process.

The provision of central freedoms in the Capabilities Approach (Sen's 'substantive opportunities' (2009, p.295)) is aligned with the constitution of a just society and could be conceived as a model of 'justice as capabilities'. This model differs from utilitarian approaches to justice by prioritising a mixture of freedoms ahead of some presupposed ranking of political, civil, economic and social rights (Nussbaum 2011, p.67). This opens up flexibility for the Capabilities Approach to cater for the plurality of values in a democratic society and offers an opportunity to consider what justice for dogs might look like.

3.6 Developing a justice for dogs

Sen (2009, p.xv) describes the *niti* and *nyaya* as contrasting forms of justice from Sanskrit which have direct correspondence to the models of justice introduced in the preceding sections. The *niti* describes a model of institutional regularity and is most easily represented in my thesis as the 'justice as fairness' framework. The *nyaya* on the other hand has its roots in social choice and outcomes, represented by the 'justice as capabilities' framework. Sen asserts the sufficiency of these two kinds of justice as essentially describing the idea of justice in contrasting ways. In this way, I assert the sufficiency of these two frameworks as a comparative basis to formulate my conception of justice for dogs.

This section develops an applied philosophy of justice for dogs through a critical reflection of the frameworks of rights and justice. The fundamental importance of utilitarianism to the rights of animals in society directs my attention toward Rawls' 'justice as fairness' as a foundation of an applied philosophy of justice for dogs. The nature and scope of a Rawlsian contract for dogs is shaped through a critical analysis of literature on 'justice as fairness', in particular taking account of the contrasting views of Sen and Nussbaum and their advocates in order to develop a framework of justice which may apply to dogs in theory and practice. This theoretical framework then forms the basis for a critical reflection on how justice for dogs manifests in practice within my context of planning for dogs in urban environments (see Chapter 14).

The importance of sentience to justice for animals

Before we proceed further and consider justice for animals, the question of whether sentience is feasibly required for justice to apply in practice needs careful reflection. Garner (2012) argues that if animals are admitted into the sphere of justice, there is little

to prevent inanimate objects, like plants, from entering the sphere of justice too. Fulfer (2013) attempts to bring plants and other non-sentient life into the sphere of justice based on the argument that since people have relationships with plants and other non-sentient life, there exists a moral obligation on the part of humans to respect that life's capability of flourishing. This obligation arises out of an apparent extension of Nussbaum's arguments for justice applying to sentient animals, with Fulfer (2013, p.31) making the inference that "if justice arises in [relationships with sentient animals], then *it seems likely* that justice also arises in relationships with non-sentients" (emphasis added). Fulfer's argument appears to rely on the obligations humans have to non-sentient lives arising from some social contract between humans and the ecosystem rather than obligations from a utilitarian-based contract between humans and other sentient lives. Midgley (1998, pp.90-1) on the other hand highlights the importance of sentience in the "very dramatic difference it makes in the kind of needs which creatures have, and the kind of harm which can be done to them". Sentience introduces heightened sensitivity of the animal to its own needs and the impact of harms, in turn distinguishing between social duties owed to sentient lives and ecological duties owed to non-sentient lives; Francione (2000, pp.125-6) refers to sentient beings as belonging to the 'moral community' of whom we consider to have moral interest.

Rolston (1998) muddies this delineation of sentience by suggesting that the choice to promote one life over another is anthropocentric and agitates against harmony in nature; in this way, he argues that the preservation of viral and bacterial lifeforms may achieve outcomes for the greater good for other sentient animals (in the sense of utilitarianism). The same argument feasibly extends to other living organisms such as plants but also those less respected, such as insects and weeds, since they may be symbiotic to the lives of some sentient animals. Therefore, even if our recognition of interests and conception of justice is based on the interests of sentient animals, the recognition of the role which other lifeforms play and perhaps their own interests cannot easily be ignored.

Feinberg (2013, p.375) nevertheless asserts that plants are incapable of possessing rights in the sense that they can't reasonably make claims about their life now or in the future and are incapable of suffering, and any protection from harm afforded to plants is to intentionally benefit humans rather than the plants themselves. He then extends this argument to canvass species of animal, arguing that they too hold no rights as a group

rather are protected by animal-cruelty legislation to achieve human ends of preservation of the collective.

The ability to suffer is a common delineator of an entitlement to justice (e.g. in the widely-subscribed philosophy of Bentham introduced in section 3.1), along with the consideration of other interests. Rowlands (1997, p.245) concludes that humans and sentient animals have the capacity to suffer, whereas non-sentient life-forms and objects do not have that ability. This accords with Dawkins' (1985, pp.28-9) articulation of suffering as "experiencing one of a wide range of extremely unpleasant subjective (mental) states", this definition clearly excluding non-sentient lives. It seems on balance that non-sentient creatures are incapable of suffering.

In order to consider expanding the realm of conventional justice to non-sentient lives, Fulfer (2013) focuses her criteria for justice on the ability to experience 'harm' rather than 'suffering', framing justice as the process enabling a life to flourish to the best of its capability. However according to Francione (2000, pp.6-7), plants lack the neurology and physiology to feel pain (at least in a similar way to how we as humans feel pain); this lack of similarity impedes our ability to assess the relativity of circumstances and outcomes for plants to allow a thoughtful exercise of justice. On balance it seems that suffering is a minimum requirement to be afforded justice within the confines of the human realm and, since non-sentient lives cannot suffer, then they can be excluded from the sphere of justice.

Justice for (sentient) animals

Rawlsian contractarianism requires that those whom are subject to the laws and principles need to be a party to their construction (Garner (2003) excludes animals from justice for this reason) and in order to be a party to their construction one must be able to conceive their good and must be a moral concern (Rawls 1999, p.17); in other words, "those who can give justice are owed justice" (1999, p.446). Through different arguments, Rowlands and Nussbaum both reject this requirement for rationality and in doing so open the door for all humans and some animals to be entitled to justice. In challenging Rawls' stance, Nussbaum treats the questions of "who makes the laws and principles" and "for whom the laws and principles are made" separately (Nussbaum (2006, p.349); also Nussbaum (2011, pp.86-7)). Likewise, Rowlands (1997) proposes that an endowment of species is as 'morally arbitrary' as an endowment of rationality

and, in any case, contractarianism does not strictly require rationality for a valid contract to exist: “there is nothing in contractarianism *per se* that requires the contract be restricted to rational agents” (1997, p.236). By setting aside the requirement for rationality in order to access justice, Nussbaum and Rowlands are explicitly including infants and those of low mental capacity within the fold of justice and in doing so arguably leaving open the inclusion of sentient animals too.

In saying this however, Rawls (1999, p.442) does extend justice to infants as they have potential to be rational agents in the future however he offers no support to humans who permanently lack such potential, describing their predicament as a (natural) disadvantage and an ‘arbitrary contingency’ that limits a person’s liberty and, therefore, access to justice (1999, pp.446-8); in any case, Garner (2013, ch.9) argues that the effect of such disadvantage in practice on so-called ‘marginal cases’ is not so great as to justify affording animals justice. Rawls nevertheless recognises that his social contract theory is limited in scope and can never comprehensively approach the question on justice for animals (Garner 2012; Rawls 1999, p.15). His brief comment on justice for animals asserts that any conception of justice which humans owe animals depends on conceptions of a natural order in the world and where humans and animals are perceived to sit in the hierarchy (Rawls 1999, p.448). Making such an assessment is a value judgement (Garner 2003), perhaps moderated by the norms in western society that humans are inherently superior to animals (Garner 2013, pp.14-5). Humans can (and do) owe compassion and humanity to animals (i.e., Rawls (1999, p.448): “certainly it is wrong to be cruel to animals”) and can act as their agents out of compassion or self-interest if they so choose (Garner 2003, 2012). Despite the common stance in contemporary western society that cruelty to animals is wrong (Garner 2003; Smith 2008) and, as some believe, that cruelty to animals has the potential to encourage acts of violence amongst humans (Garner 2013, p.64), there is no implied requirement or obligation on humans in Rawlsian justice to furnish animals with an entitlement to strict justice.

Rawls’ theory of justice is a comprehensive device for increasing our understanding of what justice might mean to society, “more a thought experiment than a political method” (Coeckelbergh 2009, p.73). Rawls’ idea of justice is one normative conceptualisation of what justice might be, accommodating “both reasonable philosophical conditions on principles as well as our considered judgements on justice”

(Rawls 1999, pp.18-9). Nussbaum's capabilities are similarly a device for understanding what values society might have (Nussbaum 2011, p.27). According to Nussbaum, Sen takes a different approach to Rawls: rather than following this normative approach to the question of justice, Sen argues for a scenario-based approach in order to gradually move in the right direction on issues as complicated as justice (Nussbaum 2011, p.76). In this critique, both Nussbaum and Sen argue that Rawls focuses too much on the normative and the ideal, in turn sacrificing the usefulness of his theory as applied to real world problems.

In place of Rawlsian contractarianism, Coeckelbergh (2009) proposes 'cooperative contractarianism', a derivation of Rawls' theory that relies on the social relationships between humans and animals in society. In his view, cooperative contractarianism allows us to consider the distribution of justice to animals on the basis of their social links to humans rather than any prerequisite rationality, moral standing or ontological compatibility. These social links are represented in a contract that equally represents the two parties, even if they are in other ways unequal. In a justice for animals, the parties (humans and animals) are often already in a cooperative relationship (particularly so in the case of humans and domesticated animals) and are clearly in other ways unequal. Cooperative contractarianism may therefore point to an obligation for humans to afford justice to animals with whom we share social ties, introducing the idea of justice for dogs.

Moving towards a justice for dogs

The importance of social ties in the cooperative contractarianism of Coeckelbergh (2009) supports the contention of Garner (2012, p.170) that domesticated animals are "very much a part of society" and, following the social argument of Coeckelbergh through, there is a potential for dogs to come within the fold of justice. Furthermore as animals lack the intellectual capacity of humans, Coeckelbergh (2009) argues that they are unable to resist the control of humans and their domestication was not their choice. Earlier, I asked the question of Kymlicka and Donaldson (2014b, p.204) – to "what do we owe to animals whom we have brought into our society as a domesticated caste" – a question which I now explore in the context of justice for dogs.

Bearing some similarity to Coeckelbergh's cooperative contractarianism, Smith (2008) describes an assignment of a social contract that can be limited to human and animal

members of the political community as a means to afford justice to animals. Like Rawlsian and cooperative contracts, the social contract is a “heuristic device, a way to ensure that we take into account the objections that animals might have to our conduct” (2008, p.200) as a test for humans to apply against actions they might take or have taken. In administering the social contract, the humans act as agents to affirm or reject the contract on the animal’s behalf. This process should loosely take into account that “some animals may have moral standing” (2008, p.201) and then treat those animals appropriately.

Smith’s criteria for animal membership of the political community are quite subjective. Firstly, Smith relies on empirical observations and judgement to recognise particular animals as subjects of justice and enjoying freedom, worthy of our empathy. Secondly, Smith sees them as being recognised in some way at a state-level (through regulation or legislation), leading to what she describes as a ‘civic personality’ (Smith 2008, p.206). Throughout this, Smith contends, particular animals can be furnished with a political membership pre-politically in the sense that they have been assigned an entitlement to their own self-worth and dignity by virtue of a deep social connection. Smith is particularly inclusive of domesticated animals as being (automatically) members of the political community. It seems that we in society must be interested in the welfare of the animal and choose to regulate them in some way in order for their admission into Smith’s political community. It seems that this is not so different to Nussbaum’s (2006, p.387) example of unequal rights of the (destructive) rat and (harmonious) dog. Ilea (2008) is however curiously critical of Nussbaum’s inclusion of certain species to the exclusion of others as lacking definitive selection criteria; nevertheless, Nussbaum is clear in her focus on sentience and shows a clear deference to utilitarianism when political membership of particular species is contemplated (Nussbaum 2006, pp.361-2).

Garner (2013, pp.100-5) however argues that a theory of justice based predominantly on social relationships without due focus on innate capacities of individuals is inherently flawed; in illustration, he argues that justice for human subjects would suffer where the entitlement to justice relies on one’s own (human) social network. Citizenship presents an alternative mechanism to distribute justice in place of other mechanisms such as social contracts. Donaldson and Kymlicka have developed a model of co-citizenship where domesticated animals join the political community through humans acting in agency to reflect their interests, protect their rights and grant them freedoms (Donaldson

& Kymlicka 2011, ch.5; Kymlicka & Donaldson 2014b). In terms of a theory of justice, whilst Donaldson and Kymlicka's co-citizenship model for domesticated animals is inspired by a social relationship between humans and animals, Garner (2013, p.103) argues that since the model is underpinned by requirements for particular expressive and political capacities of domesticated animal co-citizens, it consequently avoids the pitfalls of a model based predominantly on social relationships. In the next chapter, I engage in a broader discussion of agency, identity and urban citizenship and how they might apply to dogs in practice.

Humans that keep domesticated dogs as companions have a substantial impact on how the dog lives its life, on what opportunities the dog has available to it and (to an extent) whether the dog is allowed to suffer. The dog is dependent on their human companion and this dependency of the dog naturally leads to a strong and powerful social connection with their human companions and with broader society. Together, the ability for humans to inflict pain and suffering on dogs (intentional or unintentional) and the strong relationship the dog shares with society, a relationship which humans and dogs jointly produce, lead me to conclude that a social contract or a more complicated form of citizenship connecting humans and dogs has the potential to exist and domesticated dogs therefore deserve to fall inside the sphere of justice.

My thesis endeavours to focus on justice for dogs through a lens of planning for dogs in urban environments. Observing the often patchy recognition of animal rights in society shows that simply because animals may be deserving of certain rights and privileges in society, this does not immediately translate to the bestowal of an entitlement to those rights and privileges (Nussbaum 2011, pp.157-8). Likewise, being deserving of justice does not immediately translate to an entitlement to that justice. Urban environments can contribute to a dog's enjoyment of opportunities and possibilities, granting freedoms enabling them to live their life *as a dog*. Through both its normative and physical traces in society, planning for dogs has the potential to create more just outcomes for dogs living in urban environments.

4. FOUNDATIONS OF PLANNING FOR DOGS

In Chapter 1, I introduced ‘planning for dogs’ as a composite discipline whose practitioners comprise animal management officers, open space planners and urban planners as their work corresponds to the subjects of planning, dogs and urban environments. As one of these disciplines, urban planners ‘interact’ with the urban environment at all scales, developing plans from small to large, from the operational to the visionary (LeGates & Stout 2009, p.351). As well as having an overarching role in planning, the urban planner is in a position of considerable power as a gatekeeper of information, holding the keys for access to the urban planning process (Davidoff (1965), Forester (1980, 1982, 1987), Sager (2009) and others). The urban planner can be negotiator, mediator or an impartial resource for advice and expertise, in some cases simultaneously, and often acting as an advocate for a particular outcome. The urban planner is also empowered with prioritising the many and varied objectives and problems of their stakeholders (the community, or others) and determining a logical path for implementation of the urban plan (Hall & Tewdwr-Jones 2011, p.254), their actions leaving both physical and social traces on the urban environment (Lefebvre 2003, p.151). Urban planners are broadly responsible for the shape and form of land in terms of how that land is used and what development takes place, essentially creating the blank canvas upon which the interdisciplinary planning for dogs in urban environments can take shape.

In the preceding chapter, agency freedom was found to be of particular importance when considering justice for animals. In section 4.1, I begin by characterising different models of agency for dogs and situate these alongside Sen’s generic agency freedoms, following which I explore the importance of identity in the formulation of various social constructs. The idea of citizenship for dogs is introduced by reflecting on various marginal cases of citizenship present throughout society and then carefully considering citizenship for dogs in urban environments by reference to the equal consideration of interests. In sections 4.2 and 4.3, I explore the role of urban planners in establishing the environments within which dogs and humans coexist and urban identities and citizenships are created. I examine how values pervade the practice of urban planning, in doing so emphasising the importance of localised planning processes and outcomes in the absence of community consensus. Importantly, this highlights the importance of councils (local government authorities) in planning for dogs.

4.1 Agency, identity and the citizenship of dogs

Agency leading to identity

Animals are a part of nature. In her discussion on how nature is represented within a political community, Eckersley (2010) brings into question the authority of nature's human advocates: what are their motivations, what is their background and understanding of nature, and how is the legitimacy of their representation determined? These are essentially ontological considerations demarking humans from nature characterising what representation is ultimately validated and by whom (see section 4.3, particularly Delaney (2001) and Fitzsimmons (1989), for alternate constructions of nature). Forming similar conclusions to Eckersley, Philo and Wilbert (2000) assert that the dominant demarcation of humans from animals is a Western tradition and that taking serious account of 'other knowledges' creates an opportunity to shift away from that demarcation, in turn providing an opportunity to grant animals more interests and, perhaps, providing them with an opportunity for genuine agency in their own right.

In Chapter 3, I introduced Sen's agency freedoms as a generic framework closely related to the broader Capabilities Approach and representing how agents can enable freedoms for other subjects, including animals. In what can be regarded as essentially a derivative of Sen's generic agency freedoms, Donaldson and Kymlicka (2011, ch.5) introduce a 'dependent agency' whereby the agent is trusted by the subject to act in their best interests and epitomises a relationship of caring. This agency is a two-way street: in order for the dependent agency to take shape, the subject needs to understand what signals to communicate to the agent in order to ensure their interests are known and that meaningful action results, be that subject a domesticated dog or a visiting but liminal bird. The 'subjective good' is inherent to the subject (as its name suggests) and is represented in the private relationship between that subject and its caring agent. In the context of planning for dogs, the dependent agency relationship represents the 'private dog' relationship (in contrast to the 'public dog'; see Chapter 2) as a precursor to any wider social or political participation.

In order to make their plans, planners act as representatives (agents) for the subjects of their planning. In mobilising such agency, Sen's generic agency freedoms require self-determination, reasoning and deliberation, performance of actions, and an affective outcome (Crocker and Robeyns (2010, pp.80-2); see Chapter 3). Certainly these are

present in the case of dependent agency however the outcomes do not affect society as a whole, rather they are felt privately. The nature of each dependent agency relationship is different to the outsider, confounding the representation of the public dog from a dependent agency perspective. As an alternative, Michael's (2000) 'hudogledog' is an entity which brings together the human, dog lead and dog as a single functioning unit of (private) dependent agency, essentially characterising the public dog as a single actor. Similarly, Howell (2015, pp.171-3) suggests a 'dog-walking city' assemblage which comprises units of dogs and humans, perhaps hudogledogs together with other non-hudogledog units, that function in complementary agency with one another in such a way that agency emerges sensitive to the urban context. These hybrid units act on society and vice versa, leading to a curious consideration of the identity of the dog as socially inseparable from their human owner when in public, institutionalising the dog's position as inferior in their human-dog pack. Under such an agency, any consideration for the public dog from an outsider is ostensibly for the hudogledog unit rather than the dog themselves. This is perhaps reflective of how society views the public dog in practice (Jackson, P 2012; Sanders, C 2003), with Kymlicka and Donaldson (2014b) going so far as to claim domesticated animals have been denied an identity of their own.

My thesis however does not assume from the outset that such a blanket absence of identity applies across all manner of urban contexts which embroil the dog; rather, the nature and extent of such representations will naturally emerge as they are uncovered (similar to the emergent production of different agencies in Howell (2015, pp.171-3)). Sen's generic agency freedoms offer the opportunity to consider whether agency can be afforded to the public dog as a stand-alone subject, without the intermediary of their human companion to speak for them in their engagement with society. Accordingly, in undertaking my research I do not assume that the public dog necessarily has a composite identity with their human owner (e.g. the hudogledog) or an identity-by-proxy of their human owner (e.g. dependent agency). Whilst such derived agency may be an observed outcome, it is not assumed to be the case in all circumstances. By focusing on the capabilities of dogs, in my account of planning for dogs in urban environments, I leave open the opportunity for the public dog to be the direct recipient of agency from institutions and the planners who make their plans.

Identity leading to citizenship

Interactions within the community vary in their reliance on identity. Some street encounters are entirely superficial meetings of ‘random acquaintances’ involving no meaningful interaction or need to share identity (Lefebvre 2003, p.19). The ‘public acquaintance’ is a more meaningful interaction, with some marginal exchange of identity but nevertheless one which we do not admit into our private life (Jacobs 1989, pp.54-6). Finally, ‘private acquaintances’ are those which rely on the sharing of identity. Through the ‘social lubricant’ effect, dogs are shown to directly aid the transition from random acquaintance to public acquaintance (McNicholas & Collis 2000; Messent 1983), thereby helping dogs themselves develop their own social identity as socialisation transitions from the exclusive private realm to the inclusive public realm (Jacobs 1989, pp.63-4).

More formal social constructs that include dogs, in particular dog runs and dog parks, have attracted contemporary attention primarily in their role as a human social construction (Graham & Glover 2014; Jackson, P 2012; Matisoff & Noonan 2012) with a number of supporting cases from the United States (Krohe Jr 2005; Lee, Shepley & Huang 2009; Tissot 2011; Urbanik & Morgan 2013). Fencing of parks for dogs, including fencing of parks as dog parks, is desirable amenity for dog owners by inviting them to socialise together in a dedicated space with their dogs (McCormack et al. 2010). Nothing however precludes dogs from participating in these opportunities in their own right, enhancing their owner’s social opportunities or having an identity of their own, that canine identity perhaps ranging from the ‘dog-as-avatar’ of Graham and Glover (2014) to a reflexive dog-owner composite identity alluded to by Jackson, P (2012). Understanding how planning for dogs takes shape can provide a window to observe how agency is created and what kinds of identity emerge in different circumstances.

Such identity is a relatively informal construct which changes with context. The notion of citizenship codifies the identity of an individual and in a traditional sense includes “political, social and civil rights for all... underpinned by individuals accepting that they have responsibilities and obligations” (Imrie, Pinch & Boyle 1996, p.1258). Less formal citizenships have sprung up, with Lepofsky and Fraser (2003) describing a shift in focus of citizenship from a status to an outcome arising from the doing of action; a corollary of this definition being that as citizenship becomes more local, so too does this

role of ‘doing’, aligning well with the notion of citizenship as associated with engagement at the community level and the exercise of agency (Staeheli 2003). Accordingly, I now introduce the idea of citizenship and how that might apply to marginal cases, leading towards considering a possible citizenship for dogs.

Citizenship and marginal cases

At a conceptual level, Donaldson and Kymlicka (2011, p.101) describe ‘citizenship’ as (at a minimum) consisting of residency (or place), sovereignty (or rights) and agency (or power and responsibility). The presence and emphasis of each of these components at any given time articulates the strength of the individual claim of citizenship. This fluidity of citizenship is driven by a number of factors such as large scale migration, political structures, identity politics and the dominant ideologies of the place and time (Staeheli 2003). It is politically multi-scalar, potentially applying at local, regional, national and supranational levels, and plural since an individual can have multiple citizenships at any given time. Urban citizenship is particularly problematic, plagued with fuzzy borders around cities and ambiguous peri-urban settlements. Those who ascribe urban citizenship to some (and not others) ought to ask themselves why this community (and not that community) is considered inherently ‘urban’ (Varsanyi 2006).

Urban citizenship is not a political or state-based assignment but rather something ascribed to an individual based on the ‘doing’ or ‘acting urban’ in the urban environment (Brown, A 2013; Lepofsky & Fraser 2003). Particularly nowadays, citizenship is not a passive status but requires both maintenance and effort on the part of the citizen to participate (Lepofsky & Fraser 2003). Language is a key facilitator of participation, however a lack of fluency can introduce a barrier affecting both the potential for broader community participation and stake in citizenship; indeed, Inglehart and Woodward (1967) show that the linguistic landscape of the community shapes social norms and the nature of citizenship. Communities with diverse ethnicity nevertheless tend to experience lower levels of civic engagement, community participation and trust (Fieldhouse & Cutts 2010), potentially leading to longer-term structural segregation and social exclusion, with any integration efforts affected by language barriers and cultural differences (Hiebert & Ley 2003). Some governments are aware of the issues of unequal citizenships for those identifying with minority cultures. In the United States, Snowden (2005) describes the positive social impact of

housing and welfare policy which encourages or facilitates the very poor to relocate to areas that do not experience concentrated poverty; Yuen et al. (2006) describe a similar scheme in Singapore. More broadly, a fundamental role exists for government, private and not-for-profit sectors to collaborate and help build citizenship within existing communities (Lepofsky & Fraser 2003).

Beyond minority cultures, citizenship has not historically translated into equal rights more broadly. To illustrate, the reach of citizenship has affected the right for women to vote (Australian Electoral Commission 2011a, 2011b), working rights for women (Dwyer 2006; Jefferson & Preston 2005), working and residency rights for illegal immigrants (Bosniak 2000; Brown, A 2013), and rights for the urban poor (Brown, A 2013). Whilst the reach of citizenship has been gradually extended over time to recognise equality of interests, there remain marginal cases of unequal citizenship. These marginal cases of unequal citizenship introduce considerations which may be relevant in considering a citizenship for dogs.

It is important to proceed with caution however. Philo (1995) describes animals as having been historically cast as ‘things’ that possess certain characteristics, varying degrees of goodness, purity and profanity for example, which consequently differentiate their contribution to society from that of humans. Using the example of livestock, he goes on to describe some animals as being historically ostracised from the community because they are pests which do not belong in cities. Whereas he does not describe domesticated animals in the same way, he does paint animals as (at best) living on the margins of the human society. Nevertheless to link marginal human cases of citizenship to animals is precarious, riddled with controversy not for the implications on interspecies hierarchy rather the implication that class is codified and arranged within the human species (Kymlicka & Donaldson 2014a). In the broader consideration of justice for animals, making such a direct link is discredited by Garner (2013, ch.9) as exaggerating the similarity between animals and marginal human cases or, moreover, exaggerating the difference in both interests and rights of marginal human cases relative to the broader human population. In order to address these concerns, my consideration of citizenship of dogs thus focuses on their rights and responsibilities in an absolute sense. The comparison of the citizenship of dogs to the marginal human cases can then be made based on rights and responsibilities conferred by citizenship rather than on any basis that challenges their inherently unequal interests.

Towards a citizenship for dogs in urban environments

Dog ownership is shown to reduce the health care burden on society culminating in lesser visits to the doctor after controlling for any difference in the initial health of dog owners (Headey and colleagues' series of studies (1999; 2007; 2002; 2008)). Dogs have also been shown to generate substantial social opportunities in urban environments (Bueker 2013; Eddy, Hart & Boltz 1988; Gaunet, Pari-Perrin & Bernardin 2014; Laurier, Maze & Lundin 2006; McNicholas & Collis 2000; Messent 1983; O'Haire 2010; Wood, Giles-Corti & Bulsara 2005), highlighting a role for both dogs and dog owners in developing a greater sense of community. These actions of dogs make urban environments a more liveable place, particularly for those severely lacking human companionship. These benefits arising from dog ownership demonstrate that dogs do contribute to society in tangible ways (see Chapter 2).

There is nevertheless a perception held by some in liberal society that in order to have rights to be heard, rights to vote, rights of use of public space and rights of the title of citizen, one needs to contribute tax revenues (Brown, A 2013). Other species do not have equal capacity to generate such revenues nor do they have equal interests in voting, but they do deserve to have equal consideration of interests that are important to them (Singer 2009, ch.1). In a similar vein, Nussbaum (2006, ch.6) approaches equal consideration of interests of other species as requiring consideration of a minimal set of threshold capabilities. Either way, the equal consideration of interests of dogs introduces a need to better understand the nature this political identity.

As with other animals more generally, dogs create a political identity through the traces of their controversies or 'disruptions' to the social order by their activities or mere existence (Instone & Sweeney 2014; Philo & Wilbert 2000, pp.14-6). Donaldson and Kymlicka (2011, pp.113-4) characterise this political identity as one of advocacy and agency for change. Just as with Callon's (1986) scallops (described earlier in the Foreword), dogs create social fractures through no fault or intentional interference of their own part. In essence, dogs have created a citizenship shaped by a political identity. The equal consideration of the interests of dogs and the benefits which dogs afford society both encourage the consideration of a dog's right to have citizenship.

In contrast, the responsibilities of citizenship of dogs are characterised as consisting of aspects of cooperation, reciprocity and self-regulation (Donaldson & Kymlicka 2011,

pp.116-22). Dogs are emotionally intelligent creatures capable of understanding and responding to the emotions of their human owners (Walsh, F 2009b) and their environments more broadly (Shapiro 1990); to an extent, humans likewise are capable of understanding dogs, tempered with a degree of anthropomorphism (Bahlig-Pieren & Turner 1999; Buckland et al. 2014; Kerswell et al. 2009). Dogs similarly demonstrate reciprocity and a critical awareness of equality in strength and size through their actions during play: Bekoff and Pierce (2009) observe an apparent, unwritten expectation that play between dogs ought to be fun and behaviours that are counterproductive to that objective are not tolerated by the pack. Conversely, play between dog and human appears more deferential on the part of the dog, the dog adapting their play to entice the social interaction with humans (Bradshaw 2012, pp.202-6), perhaps underscoring the position of dogs as subordinate to their human 'owners' (see also Chapter 3). In a general sense however, animals do not always stay in their assigned role in society as they transgress and disobey the regulations which humans establish in order to control what part they play in society (Philo 1995). Dogs are of course no exception to this, epitomising their role of 'dog-as-problem' in human society (Instone and Sweeney (2014); see also Chapter 2). In being cast as a nuisance, dogs are nevertheless not solely to blame; some dog owners are prone to disobedience too with the dogs essentially innocent and unknowing participants (Rohlf et al. 2010; Williams, K et al. 2009). Regulations nonetheless tend to constrain dogs to 'proper' spaces as subordinate members of the community (Instone & Mee 2011), commensurate with the broader and largely implicit treatment in society that relegates liminal creatures to urban backwaters and runt spaces (Donaldson & Kymlicka 2011, ch.7; Philo & Wilbert 2000).

In predominantly rural situations where the constraints of the domestication relationship are relaxed and dogs are allowed freedom to make more choices which affect their lives, dogs do demonstrate a capability to define and exercise both rights and responsibilities of citizenship (Donaldson & Kymlicka 2011, pp.119-22). My thesis examines planning for dogs in urban environments through a lens of justice, in turn providing insight into how citizenship of dogs emerges in an urban context. Accordingly, I turn to examine the philosophy and practice of urban planning in Victoria as a precursor to formulating a conception of urban planning for dogs to follow.

4.2 The philosophy and practice of urban planning in Victoria

The philosophy of urban planning in Victoria

According to Faludi (2000, p.299), any strategic (urban) plan should define with explicit clarity the actions that ought to take place to realise its objectives. The strategic plan is elevated to utmost importance in Faludi's conception of the urban planning process, driving the downstream actions that realise the plan's articulated outcomes. Healey (2009a) articulates 'strategic' in the context of strategic planning to mean something that is transformative, selective, representative and ultimately enduring. The vision then becomes deeply representative of the local community. Strategic planning is therefore not an exercise of consolidation of existing ideas, rather one of discovery.

Urban planning for dogs is a normative ideal that ostensibly meets Healey's (2009a) definition of strategic (urban) planning. The strategic planning process itself is reflexive on planners, participants and the community, the strategy being a manifestation of how people think and act (Albrechts 2004, 2006; Healey 2009a). In his more contemporary work however, Albrechts (2010) articulates the culture of planning as present within a deliberative environment. He calls on planners to listen to their own creative voice and that of the people when bringing the collective vision to life, a responsibility of both government and planners. This recognises the indispensable role of government in normalising the multitude of voices feeding into the strategic planning process, echoing the ideas of Fischler (2000), Owens, Rayner and Bina (2004) and others. Contemporary thinking introduces distinct roles for the planner, the community and government, each being key stakeholders in strategic planning. The pervading planning paradigm and politics of the day then introduce uncertainty in deciding how each stakeholder should become involved in the strategic planning process, to what extent that involvement ought to be, and when that involvement should take place.

Urban planning takes place in context, highlighting the importance of understanding how planning takes place in Melbourne, the capital city of Victoria and the site of my case study. In Victorian councils, urban planning generally consists of two compartmentalised functions: strategic planning and statutory planning (Eccles & Bryant 2011, p.1). The *Planning and Environment Act 1987* (Vic.) ('PEA') is the principal legislation governing urban planning in Victoria, prescribing various consultations relating to both the scheme amendment process and the implementation

(or permit) process. The bedrock of statutory planning in Victoria is the planning scheme, a document produced by each council that has a substantially common core of standardised provisions with local inclusions, exclusions and adjustments. The core standardised provisions (the *Victoria Planning Provisions*) have led to an enhanced focus on state and metropolitan strategy for councils undertaking local strategic and statutory planning activities (see Buxton, Goodman and Budge (2005) and Chapter 13).

Strategic (urban) planning is an institutional (cf. individual) function with outputs which may or may not lie within the purview of the PEA; that is to say, not all strategic planning requires amendments to planning schemes (Eccles & Bryant 2011, p.2). Furthermore, strategic planning as a function can be highly ambiguous between different institutions with respect to the variety of possible implementations and the overall priority of a particular strategy to an institution relative to other relevant considerations (Stein, L 2008, pp.98-100). Whilst consultation with the community is encouraged by the Victorian planning framework in both the planning scheme amendment and permit application processes, it is unrealistic to expect consultation from various organised and disorganised publics to penetrate the institutions which govern the strategic planning process, a “hopelessly idealistic” theoretical position to hold in the opinion of March (2010, p.122). Any legal appeal of a council’s strategy is substantially limited by the very narrow terms of reference of the Victorian Civil and Administrative Tribunal¹ (VCAT); in this way, the planning system is both institutionalised and inherently centralising (March & Low 2004). The theories of consultative and deliberative planning are at extreme odds with the practice of strategic planning in Victoria (March 2010, p.117), this disjunction perhaps a demonstration of the “collaborative planning in an uncollaborative world” of Brand and Gaffikin (2007).

The ambiguity of implementation in Victorian strategic (urban) planning leads to a focus on outcomes rather than any standard planning process, correlating with the ideas of Faludi (2000). The shell of planning schemes and permits cede broad flexibility to the government of the day, providing government with the means to align the direction of the future urban environment with their particular ideals. In this way, urban planning *outcomes* in Victoria are values-driven despite the legislative framework of the PEA

¹ VCAT is a dispute resolution tribunal which hears a range of disputes across four divisions: civil, residential tenancies, administrative and human rights. VCAT decisions are binding but can be appealed on questions of law in the Supreme Court of Victoria (VCAT 2015a; 2015b).

providing a planning *process* that is “ostensibly without values” itself (March 2010, p.114). Therefore, any hurdles that urban planners face in considering planning for dogs in the Victorian context are essentially philosophical rather than legislative.

These philosophical hurdles manifest controversy in both urban planning process and outcomes. Whereas the Victorian urban planning process is conventionally values-free, how planners choose to include or exclude other subjects from their planning process is laden with values (e.g., the values-laden decision-making of Hillier (1999)). Thus both how and why the urban planning process is done or not done is imperative to understand planning for dogs. According to March and Low (2004), the nature of (urban) planning in Victoria is such that local interests “[have] an enduring influence in shaping urban development on the ground” (2004, p.42), with local government decisions realistically only blocked by successful appeals to VCAT, an organisation which tends to put more weight on the bigger state picture than any localised issue. Victorian planners consequently wrestle with their values and those of the local community as they consider dogs as subjects of urban planning (discussed in Chapter 13).

The practice of urban planning in Victoria

The subject of values in urban planning is central to the idea of urban planning for dogs and this is explored throughout the remainder of this section. I continue by introducing a definition of urban planning, finding that the profession philosophically and practically positions on a broad spectrum of rational to deliberative with no single definition. Dogs are a particularly controversial subject of planning and urban planning for dogs is absolutely laden with a range of irreconcilable community values, consequently making the strategic planner’s task of making the strategic plan and vision for dogs particularly critical and wickedly complex. Understanding how the urban planning profession and the institution of council more broadly negotiate community conflict and their own anthropocentric persuasions supports my forthcoming exposition of planning for dogs in Part V.

There is no single definition of the practice of urban planning. Healey (2009b) identifies the spectrum of urban planning theory as ranging from the rational to the deliberative, a dichotomous spectrum which in turn can be expressed across a number of dimensions (Owens, Rayner & Bina 2004). These differences are clearly multi-faceted,

grounded in ideology, in practice, and embedded in context, with perhaps the ideal practice of planning varying along these spectra:

- Pragmatism to progression of Healey (2009b);
- Epistemological deductive to inductive of Bryson (2004);
- Ontological right to left of Allmendinger and Tewdwr-Jones (2002) and Brand and Gaffikin (2007);
- Instrumental end-making to attention-shaping of Forester (1980);
- Instrumental institutionalism to value individualism of Owens, Rayner and Bina (2004);
- (Post-)positive objectivity to phenomenological inter-subjectivity of Lord (2012, ch.2).

Articulating what urban planning means in practice is clearly not straightforward.

Modern rational (urban) planning is perhaps best described as being of a Popperian deductive-inductive scientific method (Faludi 1973, pp.49-51; Taylor 1980). In comparison, deliberative planning differs in both ontology and epistemology and lacks an agreed definition (Allmendinger & Tewdwr-Jones 2002; Brand & Gaffikin 2007; Healey 1998); deliberative planning is perhaps most accurately defined as an inverse of rational planning, this less precise definition arguably celebrates the plurality which it prizes. Demonstrating this polarity of urban planning theories, Davidoff (1965, pp.332-3) portrays the deliberative approach in practice as “mental exercises of planners seeking to portray the range of choice” and proposes to relieve the government of some “burden of presenting alternatives” by delegating that role to special interest groups through his advocacy planning paradigm. Forester (1982) introduces Davidoff’s ‘liberal-advocate’ planner alongside other urban planning roles, effectively painting the scale from rational to deliberative planning of Healey (2009b).

Despite many advances in the theory of urban planning over the years, many planners maintain that the practice of urban planning has remained relatively static. Dalton (1986) finds urban planning experienced a ‘two speed’ phenomenon in the mid-1980s; that is to say, the pervasive development of deliberative theory by the scholarly community is moving independently to the rational planning commonly found in practice. She attributes much of this knowledge gap to a lag in urban planning

education. Echoing the rational behaviours identified by Faludi (1973, pp.108-16), Baum (1996, p.134) shows that the rational paradigm persists as an urban planning practice due to the natural desirability of a 'safe' epistemology based on "guiding action by knowledge". In contrast, Friedmann, J (2008) likens deliberation to a political science movement, e.g. *Modernising Government* of the then-new Blair government in the United Kingdom (Brand & Gaffikin 2007), theorising that this largely contributes to its lack of relevance to urban planners in practice. This appears to support the observations of Baum (1996) that the tendency of urban planners to adopt rationality is based more on instinct than education or training. In contemporary times, urban planners in Victoria are no exception in their rational approach to planning (Buxton, Goodman & Budge 2005; March 2010).

There are nevertheless some planners in academic circles and in practice who maintain that the practice of urban planning has taken a 'communicative turn' (Allmendinger & Tewdwr-Jones 2002; Healey 1998; Hillier 2003). In contrast to rational planning, Healey (1998) describes deliberative planning as being more efficient, more legitimate and value-adding, efficient in the sense that it reduces the bureaucratic burden of government (i.e., similar to Davidoff (1965) from earlier). According to Forester (1982), planners actively choose what they plan for, to whom they listen, and what information they share. The deliberative planner is in a position of considerable power, holding the keys to information, and more importantly knowledge, thus able to guide the community towards its preferred outcome (Davidoff 1965; Forester 1980, 1982). Brand and Gaffikin (2007) describe this community disempowerment of deliberative planning as espousing an 'epistemology of expertise', whereas earlier Forester (1980) described this as a pragmatic elimination of distortions of ordinary communication (in other words, an exercise of power).

Deliberative planning introduces a need for negotiation, conflict resolution and possibly consensus, providing urban planners with less certainty than rational planning. Hillier (2003, p.39) describes deliberative planning as "inevitably messy, time-consuming, turbulent, frustrating and exasperating", with Owens, Rayner and Bina (2004, p.1950) describing a shift towards deliberative planning as receding "into a morass of system complexity and issue intractability". Joining these voices, Fainstein (2010, p.29) describes deliberative planning as a normative but insufficient concept that "does not deal adequately with the classic conundrums of democracy". Lord (2012, ch.2)

similarly describes the epistemology of deliberative planning as being inherently in conflict, where it seeks to obtain a convincing account of how information translates into knowledge and then policy however is inhibited by its own reliance on limited accounts from relatively few people. Deliberative planning shifts the basis of government from representation to participation, drilling to the core of individual, deeply held convictions of the political right and left borne from ontological and epistemological differences (Brand & Gaffikin 2007). In this way, urban planning paradigms and political ideologies are directly linked, paving the way to consider dogs as a subject of urban planning.

4.3 Urban planning for dogs

A philosophical question posed by planning for dogs concerns a need for government to understand the plurality of views on animal entitlements throughout the community that then feed into the urban planning process, ostensibly a strategic planning endeavour in the sense of Healey (2009a). According to Bryson (2004, ch.2), the strategic planning process is typically broken into four stages, comprising: visioning; issue identification; plan and policy development; and, implementation and review. Visioning forms the intersection between values and planning, where the urban planner articulates the mandate, mission and collective values of the community to articulate the institution's vision. This vision then guides urban planning downstream and is a logical starting point for urban planners to consider incorporating dogs into the urban planning process in practice.

Visioning, values and planning for dogs

Visioning as a process is a thought experiment of “‘what could’ and ‘what ought to be’”, constrained by practicalities and limitations of the real world (Albrechts 2006, p.1164), the process often associated with consensus building in the community (McCann 2001). Visions are designed to hold together disparate groups of people (van der Helm 2009), or smaller, disjointed plans, practices and projects (Friedmann, J 2008). Visioning is often a creative and participatory activity, perhaps aligned more traditionally with the deliberative planning of the political left (Gaffikin & Sterrett 2006), however is also a systematic device for bringing together policy communities and develop a common vision that can be used in future urban plan-making (Friedmann, J 2008). Visioning is a collaborative or individual procedure that relies on the

substantive values and knowledge of the community in order to generate ideas (Shipley & Newkirk 1999; Stoecker 2013, p.134). Establishing the values of the community is therefore an important early step in the visioning process; where the visioning is a collaborative process, these discussions encourage early communication between stakeholders, improving the efficacy of the visioning process (de Groot et al. 2014). Planning for dogs is inherently controversial which makes the leap to a grand vision very difficult if not impossible in the immediate term. The visioning process however need not take the leap at once, rather a vision can emerge from smaller, incremental steps where the visioning process becomes transformative in and of itself (Albrechts 2013). Incrementalist visioning aligns well with a localised operationalisation of planning for dogs in Victoria.

Planning for dogs potentially introduces a fundamental shift in government ideology on animal entitlements, both reflective of and, perhaps over time, reflexively adapting community ideology and values. The different ways scholars have studied the human-animal bond provides some insight into how the intrinsic value of dogs to humans might be identified and measured. There are many scientific studies into the effects of dogs on humans; based on fact and the scientific method, these lack the thick description of many qualitative methodologies necessary to identify and measure intrinsic values. Society is an amalgam of individuals, and so it goes with society's values; in other words, determining the value that society places on dogs is an exercise in a faithful representation of individual values rather than a typical representation of a group in the sense of Lin (1998). Faithful representation aligns closely with the nature of critical theory.

Hecht, McMillin and Silverman (2001) observe that twentieth-century research into the human-pet bond lacked the theoretical consistency of an organised research program, this observation being supported by calls to recognise the value of sociological (Beck 2000, p.25; Sanders, C 2003) and biophilic (Beck & Katcher 2003) perspectives, among others. This renewed interest arguably led to a variety of new studies into the human-animal bond from other disciplines, these building a comprehensive knowledge and understanding of the human-animal interaction. Hanrahan (2011) provides an illustrative list of such critical studies across a number of disciplines, including behavioural biology and ethology, psychiatry, veterinary medicine, law, sociology and anthropology, psychology, feminism, philosophy, theology and social work. The

comprehensive survey of Friedmann, E and Son (2009) highlights the vast majority of studies into the human-animal bond have come from a positivist or post-positivist theoretical perspective (mainly scientific or medical studies), with critical studies far less common.

In order to understand the value that humans attach to dogs, it is more instructive to look to the different ways scholars have studied the human-animal bond from critical perspectives rather than delineating the disciplines in which those studies took place. The following illustrative gazette of critical studies demonstrates the breadth of studies into the human-animal bond, potentially offering scholars the opportunity to understand the value which humans place on dogs (Table 1):

Animism (grand theory)	Animism is an ancient theoretical perspective that exerts a special spiritual and moral bond between humans and other living creatures (Serpell 2000). An animist worldview implies that every action against another spirit will have a consequential reaction, felt through implied physical or metaphysical experiences.
Attachment theory	Attachment theory is a way to understand the human-animal bond by virtue of concentrating on oneself (attachment) or on others (caregiving) (Kwong & Bartholomew 2011), this attachment of the animal to the human being based on four aspects drawn from Hazan and Zeifman (1994): proximity seeking; separation anxiety; secure base; and safe haven. In their study, Kwong and Bartholomew (2011) use attachment theory to examine the reasons behind a human's grief experience upon the death of their pet.
Biophilia (grand theory)	Biophilia theory describes the cultural amalgam of humans to animals and living things. Under the biophilia theory, humans have a hard-wired attraction towards animals and other living things. Animals make our lives more enjoyable (O'Haire 2010), without necessarily relying on any individual attraction (Beck & Katcher 2003). Biophilia theory has a worldview which is both relativist and pluralist, depending on an individual's cultural connection with animals; in this way, Melson (2000) describes biophilia as weak and easily malleable by the pervading human culture when compared to natural human instincts.
Environmental psychology	Connectedness to nature is a branch of environmental psychology that provides insight into the bonds that humans share with other (non-human) living things (Brügger, Kaiser & Roczen 2011). The measures of connectedness to nature are inherently focused on humans, based on highly subjective interpretation of data gathered from individuals as to their connection with nature.

Ethology	Ethology initially shed light on simple two-way interactions between animals, gradually incorporating features of more complex relationships and the ontologies and accompanying lexicon of the researchers themselves. Whilst restricted to the animal kingdom, this theoretical field has helped humans understand why dogs act the way they do between themselves and, by extension, interacting with us (Manning 1983; Pongrácz, Molnár & Miklósi 2010).
Phenomenology	Phenomenology is applied creatively to the study of the dog in Shapiro (1990). The spirit of the (human) phenomenological approach focuses on the manifold ways different experiences affect humans. This study applies the approach to 'bodily experience' rather than 'verbal discourse' in the study of the dog.
Social network analysis	Hecht, McMillin and Silverman (2001) provide a study into human-animal bonds which is based on social network analysis, a branch of social support theory. Social network analysis is egocentric and endeavours to characterise relationships in the context of society. Levinson (1983, p.546) is critical of social network analysis in its anthropocentrism.
Social support theory	Social support theory describes the outcome of the interaction of humans with animals and living things (Beck & Katcher 2003; O'Haire 2010). Under the social support theory, pets are social facilitators and provide social support to their human carers, improving the actual and perceived health of human companions. Social interactions are a measurable phenomenon, which can undergo rigorous analysis of both a quantitative and qualitative nature.
Social work theory	Anti-oppressive social work theory is normally targeted towards "radical, structural, feminist, anti-racist, critical and liberatory frameworks" (Hanrahan 2011, p.280) and, in its anthropocentric tendencies, is itself oppressive of non-human animals. In her teaching, Hanrahan (2011) attempts to bring an awareness of speciesism into critical social work theory, connecting human social work with the human-animal bond.
Symbolic interactionism	Focussed research from sociological perspectives, such as symbolic interactionism, has in the past been lacking in understanding human-animal bonds (Sanders, C 2003). Symbolic interactionism is based on a goal of understanding social life by virtue that "humans act toward things based on the meanings that emerge through social interaction" (2003, p.420). Social interactions arising from the human-animal bond shape the identity of the pet as well as their human owner-friend, giving each a cultural identity through ritualistic anthropomorphism. Observing each other's actions, body movements, faces and eyes are key ways humans and animals communicate.

Table 1: Illustrative list of critical studies of the human-animal bond (source: author).

Critical theory strengthens many kinds of human-animal research in its own right. Humans are prone to anthropomorphism and routinely project our experiences onto dogs, with Sanders, C (2003, p.419) describing these as our "linguicentric and anthropomorphic restraints". We have an innate lack of understanding of what it is like to live within another species' skin or thoughts (Dawkins 1985, p.38; Francione 2000,

p.6), and hypotheses which rely on such an understanding are mostly colloquial and seldom tested before being used implicitly or explicitly in research. Critical theory approaches (such as those in Table 1) can help scholars achieve a careful and critical anthropomorphism in the sense of Irvine (2008, ch.3), Johnston (2008) and Karlsson (2012), and consequently a deeper understanding of the nature of the human-animal bond in practice.

Articulating the values that humans attach to dogs and, by extension, the appetite that the community has for planning for dogs is a difficult and time-consuming task. Values are subjective and their interpretation can be ambiguous. Critical theory provides the scholar with opportunities to understand the nature of an individual's value set, providing an avenue to discover the broader values of a community. The aggregate nature of a community introduces conflict between individuals that share different values and the problem of how to achieve consensus in such a plural and often divisive environment.

Conflict, consensus, anthropocentrism and urban planning for dogs

“Planning problems are wicked problems.”

- Rittel and Webber (1973, p.160)

This profound declaration of Rittel and Webber (1973) is grounded in a relativist ontology where the meaning of the urban planning problem and the efficacy of the proposed solution are sensitive to context of people, place and time, and deeply anthropocentric. The practice of urban planning is deeply laden with values (Tewdwr-Jones & Allmendinger 1998), this being particularly evident upon the consideration of dogs as a subject of planning. This section continues to explore epistemological questions of how values and urban planning intersect and intertwine in the philosophy and practice of urban planning for dogs. Importantly with the absence of community consensus, the localised nature of urban planning for dogs is shown to be particularly significant.

Cities cannot be everything to everyone and therefore routinely generate conflict from “an ultimately irreducible plurality of values” (Hillier 2003, p.39). Along with threats to respecting individual values, opponents of deliberative planning view consensus as disrespectful to differences, exclusionary of some communities, anti-political, utopian

and emancipatory (Sager 2009) and potentially exclusionary of people, issues or outcomes (Richardson & Connelly 2013, p.90). Those seeking consensus redistribute power from the many and various interested publics to the influential few, shifting planning from a bottom-up to a top-down approach. Connelly and Richardson (2004) opine such a shift is bad planning, this view coinciding with moving down rungs on the 'ladder of participation' (Arnstein 1969).

It may in fact be implausible for an urban planner to be successful in seeking consensus in many situations. Agger (2012) describes four kinds of engaged community participant, each expecting different treatment from the planner and the planning process. No two planning issues are identical, each engaging with different communities in different ways. The act of seeking a consensus itself changes the process too; there is perhaps a subliminal driver of participants towards some artificial end which is "more akin to bargaining and compromise than ideal consensus" (Connelly & Richardson 2004, p.8). Forester (1984) argues that rationality has a loosely defined boundary, with the issue of seeking consensus for dogs perhaps in accord with the socially unnecessary and structural distortion of "ideological rationalisation of class or power structure" (1984, p.25). That is to say, he argues that 'practical' (i.e., rational) urban planning has its limits and in the case of a pluralist environment that an incremental approach be undertaken which is based on effective negotiation; this however appears untenable in deeply polarised situations. Chapter 3 demonstrated a lack of consensus on the rights of dogs in society; any consensus on questions of planning for dogs thus appears unlikely to eventuate in practice. How planning takes place in the absence of consensus is now discussed through the lens of contemporary environmental planning.

Climate change is perhaps one of the most controversial and polarising planning issues in contemporary times, certainly in Australia (Head 2008), and the environmental sciences in particular offer a number of opportunities to examine how consensus works in practice. The 'precautionary principle' is an example from the environmental sciences that seeks to control the freedom given to policymakers (and consequently taken from the community) to aid the prevention of irreversible damage to the environment (Eckersley 1999; Sköllerhorn 1998). Næss (2001) finds the precautionary principle discourages incrementalist planning and he goes on to suggest that to effect change environmental planners need to seek limited consensus from relatively like-

mind environmental groups. Connelly and Richardson (2004) argue that 'Agenda 21', a key policy outcome arising from the landmark *United Nations Conference on Environment and Development* (June 1992) ('UNCED92'), was watered down to construct a consensus such that "blander outputs were delivered" (p.13); this was despite an abundance of such like-minded interests almost solely participating. Likewise, Bartel, McFarland and Hearfield (2014) argue that 'sustainable development' (in the sense of 'Agenda 21') is a proposition that seeks to unite disparate groups of first world green developers and third world economic developers. There is lack of consensus over where on the green-economic spectrum the world should aim and, even then, the definition itself is paradoxically anthropocentric; the decision whether to sustainably develop becomes an economic-environmental ranking exercise (Owens & Cowell 2011, ch.3). Whilst both of these preceding examples come from the UNCED92, there remains the same anthropocentric sentiments many years later with Wheeler, Randolph and London (2009, p.218) suggesting that a value be placed on natural systems so they can be measured against human systems. Anthropocentrism does not however automatically imply that planning is incapable of considering the intrinsic value of nature (Cowell 1997).

As with other kinds of planning, environmental planning lacks consensus amongst planners as to the best approach to take. Sköllerhorn (1998, pp.556-7) describes existing deliberative planning as riddled with power relations and dominated by institutions, instead arguing that rational planning would work most efficiently as long as its norms were "*a priori* or discursively green"; similarly, Eckersley (1999, p.33) describes a possible argument for a "politics of presence" for those with ecocentric values to add certainty of consideration for the interests of nature. That is to say, it is better to be rational with the 'right' set of values than to be deliberative and subject to the whims of power. In contrast, Wheeler, Randolph and London (2009, p.217) suggest that "new types of advocacy planning" may be required to effectively bypass the plurality of interested publics' values in relation to preservation of the natural environment (e.g., the limited consensus of Næss (2001); the "bargaining and compromise" of Connelly and Richardson (2004, p.8); and the "overly managed form of inclusion" of Few, Brown and Tompkins (2007, p.46)). Environmental planning may be inherently leftist and therefore more naturally deliberative (Allmendinger &

Tewdwr-Jones 2002; Brand & Gaffikin 2007); however, it perplexingly exists in and is pervaded by the anthropocentric norms of a predominantly rationally planned world.

The anthropocentrism of urban planning comes to the heart of planning for dogs. Wolch (1996, p.22) describes an urban planning which is dominated by a “peculiar perversion of our thinking”, where nature is supplanted in favour of ‘improvements’ which seek to denaturalise land in favour of human interests. To remedy this, Donaldson and Kymlicka (2011, pp.244-5) suggest that urban planners ought to account for animals through better managing risks posed to urban animals by providing animals their fair share of the urban environment; what this means in practice remains unclear. Delaney (2001) further muddies the waters, introducing ‘nature’ as social and cultural artefact of human making, necessarily messy and plural as the opposite to ‘human’; in other words, there is no one ‘nature’ that we can all easily compartmentalise. In a similar vein, Fitzsimmons (1989) portrays nature as raising questions of ontology rather than epistemology, her arguments leading me to postulate an ontological divide in how we account for nature in planning thus characterised by whether we are a part of nature and cause change from the inside or whether we affect nature from the outside. Aside from ecocentrism which is antithetic to many humans’ beliefs, humans erect boundaries between our species and nature (‘the other’) (Bartel, McFarland & Hearfield 2014); Owens and Cowell (2011, p.52) speak of this boundary in terms of ‘naturalness’ and ‘wildness’ as opposite to ‘human’, with Michael (2000, p.123) further demarcating animals from one another within nature, describing the strength of human social bonds as delineating different species. Even a perspective that celebrates animal welfare is classified by McGregor (2004, p.596) as ‘moral extensionism’ and thereby a product of our own anthropocentric ideals. We can perhaps deal with the idea of planning for dogs practically by recognising that we are innately anthropocentric, that is to say it is a humanly excusable trait, however we need to then adjust our actions somehow to account for this natural predisposition (the ‘responsible anthropomorphism’ of Johnston (2008) and the ‘critical anthropomorphism’ of Irvine (2008, ch.3) and Karlsson (2012)). Bennett (2010, pp.98-100) refers to such envisioning as the ‘seeing self’, a reflective and reflexively critical examination of the world through an ontological lens.

Planning for dogs is inherently controversial; indeed, there is no rational or consistent way for human stakeholder groups to negotiate a consensus on what the truth of innate canine experience ought to be (see also Chapter 5). Deliberative planning on its own

appears incapable of coping with a deeply divisive issue (indeed, Head (2008) finds that climate change is perhaps wicked on eight separate counts). Whereas Lord (2012, ch.2) describes the ‘communicative turn’ in urban planning as having phenomenological roots, Whittemore (2014) suggests that by approaching planning from a purely phenomenological perspective the planner can more authentically approach unfamiliar situations. Phenomenology in a pure sense is seen as a device to improve stakeholder interest and engagement and achieve more effective outcomes. In particular, he cautions that “solutions may not come in ways planners would have envisioned or liked to see, but this approach may radically broaden the range of possible solutions” (2014, p.307). Planning for dogs may warrant consideration for such a radical approach.

I argue that the new advocacy planning paradigms suggested by Wheeler, Randolph and London (2009) are in fact a theoretical rather than practical need. In its pure form, the ‘communicative turn in planning theory’ (Allmendinger & Tewdwr-Jones 2002; Healey 1998; Hillier 2003) is not generally employed by urban planners in practice (Baum 1996; Brand & Gaffikin 2007; Friedmann, J 2008), at least not in Victoria (Buxton, Goodman & Budge 2005; March 2010). Rather, a hybrid rational-deliberative planning approach appears a preferred model for participatory planning in practice. Instead of seeking and achieving an impossible consensus, the many voices of democracy are normalised by the government (Fischler (2000), Owens, Rayner and Bina (2004), Albrechts (2010) and others). This is a top-down, rational overlay to an otherwise deliberative planning process with the government composing the community’s collective value set, the data input from its various consultations and participations with the community. Notwithstanding the underlying planning paradigm being rational or deliberative, the visioning and strategy-making will invariably be normalised by the government and form the basis for the implementation of the urban plan.

This process of institutional normalisation negates the need to reach consensus; rather, the practical project of urban planning culminates in the urban environments which we experience. Irrespective of whether planning has taken a ‘communicative turn’, planners routinely reflect and reflexively adapt their plans to accommodate the manifold traces of community values over time. In this way, planners manufacture the opportunity to consider dogs as the subjects of their planning in their own right. To what extent such planning takes place in practice is keenly discussed throughout Part V.

PART III: METHODOLOGY I: THEORETICAL DEVELOPMENT

5. METHODOLOGY

Planning for dogs is a strategic, institutional and deeply localised function, leading to a focus on (local) councils in planning for dogs. The decision to plan for dogs in the community is profoundly reliant on institutional and community values. Council discourse is particularly important in this endeavour as being reflective of institutional values and, potentially, an interpretation of the community's values, this discourse taking the form of both written documents and transcripts from interviews. These institutional traces form a credible account of how each council and, in turn, the community currently plan for dogs and how they might plan for dogs in the future. Interviews with Victorian government representatives provide further perspective on how planning for dogs takes shape.

Planning for dogs is nevertheless a field of research in its infancy (see Chapter 1). Faced with such limited scholarly guidance, I cannot easily determine an appropriate criteria for sampling *a priori* and consequently revert to first principles to establish what 'representative' might mean in the context of planning for dogs and envision how planning for dogs might take place in practice. This theoretical development is set out in the forthcoming five chapters comprising Parts III and IV.

This chapter begins with an overview of the case study methodology I adopt. My study is located in Melbourne, the capital city of the state of Victoria, Australia with a population of around four million (3,999,982: 2011 Census). An overlay of 31 individual councils fulfils the formal role of local government in Melbourne. A representative sample of these councils forms the cases in my study. Grounded theory informs how I collect and analyse textual data from council documents and interviews, this procedure leading to possible theory generation from data. Following my development of these theoretical foundations, in Chapter 6 I explore what justice for dogs might mean in practice and develop a notional set of canine capabilities. This in turn suggests the constituent planning roles which afford dogs opportunities to flourish in urban environments, describing the composite discipline of planning for dogs.

Once this groundwork is established, over three chapters in Part IV I explore qualitative, quantitative and spatial attributes of councils from across Melbourne, establishing the basis for the nine key thematic clusters of councils which facilitate the development of my representative sample. Furthermore, these results underscore the importance of

institutional ontologies in guiding how planning for dogs in councils takes shape and inform a structure for my subsequent thesis exposition in Part V.

5.1 Case study methodology

The nature of case studies

Phenomena do not just happen anywhere: they happen in place and have a locational dimension. In choosing a phenomenon to study, the researcher may decide to select a particular case or instance as being representative of that phenomenon or a place to observe some other interest. In this act of selecting the case to be studied, the researcher chooses to adopt a case study methodology (Stake 2000). Planning for dogs in cities is the phenomenon of interest, this phenomenon being unrestricted to any one particular location. The city itself is not interesting in this phenomenal context; rather the choice of city is a convenient and sufficiently complex context to witness and understand the phenomenon. The city is ordinary and instrumental to the phenomenon; the phenomenon is both interesting and remarkable, leading me towards an instrumental case study in the sense of Stake (2000).

The context is metropolitan Melbourne, a region that is subject to local (municipal), state (Victorian) and federal (Australian) laws and regulations. The substantial systematic heterogeneity within the metropolitan area provides an opportunity to use a holistic multiple case design (Yin, R 2009, pp.46-60). The main unit of analysis is a census of the 31 councils within the Melbourne metropolitan area², with literature and descriptive data guiding the representative sampling of multiple cases from the census (theoretical replication in Yin, R (2009, p.54)).

The multiple case study fits the comparative case study approach of Deters and Mossberger (2006) in its careful and purposive selection of cases using the similar systems approach (see Denk (2009) for a description of that approach and Lijphart (1971) for discussion on comparability more generally). The methodology fits within Robinson's (2011) 'variation-finding' strategy in its use of literature to specify certain criteria and analysis protocols *a priori*.

² I have purposefully excluded Mitchell Shire Council from consideration due to its predominantly rural nature. Some alternative compositions of metropolitan Melbourne include Mitchell Shire, recognising its southern third as distinctly part of Melbourne's urban identity.

Applying Denk's (2009) 'similar systems design' to my study, all cases share the same fundamental properties of being regions that contain people, dogs and local government, with comparable institutional discourse within each case. The case study structure then provides comparisons that are contextually sensitive and meaningful.

Selection of cases

In Chapter 2, I identified a body of literature that describes motivations of pet ownership. This literature drives the selection of cases as I assert that pet ownership is directly linked to the existence of and an appetite for planning for dogs. The demand for dog ownership in a community is a proxy for the appetite in that community to plan for dogs going forward, motivations including economic drivers, lifestyle factors, dwelling characteristics, dog behaviours and the surrogacy function of pets. Conversely, canine interactions with urban environments are a consequence of how planning currently accounts for dogs in the community. Dogs have a private and public life, and a key aspect of their public interaction is the provision of urban parks. The nature and extent of urban parkland differs from one municipality to another and thus is a consistent and objective delineator of cases. Other aspects of the dog's interaction with urban environments, e.g. urban design installations, contribute to the characteristic variation within cases as opposed to demarcation between cases.

The attributes in Table 2 represent drivers of dog ownership and planning. The attributes have been largely derived from the broad body of literature on motivations for pet ownership and the interactions between dogs and the community that may influence dog ownership and planning in urban environments (predominantly Chapter 2). In addition to scholarly literature, a critical examination of each council's *Domestic Animal Management Plan* reveals a number of common aspects particularly pertinent to managing dogs in a Melbourne context; this examination is described in the forthcoming Chapters 7 and 8.

Drivers of dog ownership	Planning for dogs
Population • Overall • Age-specific: children, youth • Multiculturalism • Demographic ratios: fertility • Socioeconomics (SEIFA) Dwellings • Number • Kind: measure of backyards Dog population • Registered dogs • Registration activity • Incidents: barking, attacks... • Density: dogs/people, dogs/children, dogs/backyards, dogs/land	Land area • Overall • Of parks • Of dog friendly parks • Of conservation zones • Zoning and overlays Number of parks • Ordinary parks • Dog friendly parks • Restricted parks Density measures • People • Dogs • Parks • Dog friendly parks

Table 2: Attributes representing the drivers of dog ownership and planning (source: author, derived from literature reviewed in Chapter 2 and an examination of *Domestic Animal Management Plans* in Chapters 7 and 8).

The sample is chosen from the pool of 31 metropolitan councils based on a cluster analysis technique, with the representative councils in the primary study selected purposefully from within disjoint clusters based on attributes drawn from analysis of the literature (i.e., cluster sampling of Krippendorff (2004, pp.116-7)). Cluster analysis comes in hierarchical and non-hierarchical forms ('reductive' and 'selective' respectively; Aldenderfer and Blashfield (1984, pp.45-9)). A reductive cluster analysis is used to reduce the number of attributes, increasing the statistical power of the remaining information and distilling the data analysis into a manageable number of themes. Each theme offers a narrative of animal management in particular communities and reveals clusters of councils that share some similarities in urban environment and animal management approach. Selective cluster analysis provides a means to then create a representative sample of councils. The implementation of this sampling approach is described in detail in Part IV.

5.2 Research quality guiding data and analysis considerations

For research to be worthwhile, it must justifiably meet a number of stringent quality thresholds. Yin, R (2009, p.40) describes the four tests which relate to case study methodologies (internal validity, external validity, construct validity and reliability), closely mirroring those in Bryman's (2012, p.390) more generic list. Whereas Yin

places particular emphasis on construct validity as being “especially challenging” for case studies, the notion of internal validity forms the bedrock of my study and fundamentally justifies my choice of case study methodology and choice of underlying data source. Once the broad methodology and data source is settled, construct validity then governs how individual cases are selected.

Internal validity as credibility

Internal validity concerns the credibility of the research in the context of a plural and uncertain world (Bryman 2012, p.390; Yin, R 2009, pp.42-3). My research problem, the existence of a moral and, perhaps, just requirement to plan for dogs in urban environments, is ultimately addressed by humans in a human world using human processes. In speaking for dogs, humans project their own experiences and understandings onto the animal (anthropomorphism, see Chapter 3), making internal validity of heightened importance and focus in the design of my research methodology.

Anthropomorphism is ever-present when analysing human discourse that is supposed to represent dogs. Whilst Karlsson (2012) is supportive of a ‘critical’ anthropomorphism, he acknowledges that there is insufficient theory at present to guide us towards exactly what ‘critical’ ought to mean. Despite an ontological ‘sensibility’ introduced by such critical anthropomorphism in practice (Bennett 2010, pp.98-100), there remains no rational or consistent way in the sense of Lincoln, Lynham and Guba (2011) for human stakeholder groups to negotiate a consensus on what the truth of innate canine experience ought to be. Consequently, this leads to a fundamental flaw in applying common research methods like interviews, focus groups, surveys and observation of individual subjects to my research problem. Each of these methods, in different ways, provides a record of independent, individual anthropomorphic projections of human experiences that speak for potentially different animals. In other words, by using these kinds of methods on individuals there is no assurance of credibility in each case or in the research data overall.

My research problem requires an allowance by humans for dogs to live their lives authentically. To do so, humans must respect a dog’s dignity. As humans we can never understand precisely what the authenticity of a dog’s life might entail, however that lack of human capability is no excuse for not respecting their dignity and offering them freedom and potential to realise that authenticity, whatever that may be. In my literature

review, I constructed a case recognising that dogs have dignity as individuals and they have unique capabilities and potentialities, many of which we may never know or understand. I presented arguments for the recognition of dogs as urban citizens, suggesting that entitlements of dogs extend beyond our moral concern to a form of justice. In directing my attention towards notions of justice for dogs, I am recognising humanity's lack of capability to understand dogs innately but at the same time recognising that dogs have an innate life and interests which deserve equal consideration. I am not interested in others' anthropomorphic projections of their own lives onto dogs. I am interested in freedom for dogs to fulfil their potential and justice for dogs. By recognising a dog's right to justice in urban environments, whatever the form and function of that justice may be, planning for dogs as a composite profession can feasibly act for the dog as stakeholder in their continual, wide-ranging interactions with the urban form. The institutional traces of those activities then reflect the attentions of planners to the subject of dogs and, by extension, the attentions of society in a credible, consistent and comparable way.

Anthropomorphism is clearly an important behaviour to manage throughout my data collection and analysis. More generally, the internal validity of smaller case studies can also suffer from the impact of 'small-N', or where there are "too many variables, too few cases" (Denk 2009, p.29). Small-N designs tend to have internal validity issues due to the relatively small sample size and relative abundance of variables. Denters and Mossberger (2006) suggest that focussing on comparable cases and increasing the observations made within each case improves the internal validity of the comparative case study approach. The holistic multiple case study design coupled with a similar systems approach to selecting cases ought to alleviate the effects of 'small-N' to an extent, improving the credibility of the research outcomes.

Other validity and reliability considerations

Construct validity is often associated with quantitative studies but it is also a keen concern for case study research. Yin, R (2009, p.41) describes this as testing the rigour of data collection and analysis protocols, critical to supporting the validity of research and creation of truth and knowledge where the claims, data and arguments must all be 'acceptable' (Järvensivu & Törnroos 2010). Campbell (1975) asserts that multiple methods and multiple 'objects of study' are required to achieve triangulation. This

study accordingly uses textual data from both documents and interviews from across different institutions to improve the validity of my analysis. Collier and Mahon (1993) suggest that relaxing the definition of attributes when categorising phenomena improves construct validity; this is broadly in accord with Lidén (2013).

The nature of my instrumental case study does not readily contribute to a generalisable set of results in the usual sense (e.g., generalisability common to much survey research) (Yin, R 2009, p.43), however there is arguably opportunity to transfer to other cases (councils) within my broader instrumental case of metropolitan Melbourne. Nevertheless, external validity is acknowledged as potentially weak outside of the context of the single instrumental case.

Reliability ensures that knowledge arising from research can be trusted and that, if another suitably skilled researcher were to attempt to repeat the research, the same results could feasibly arise (legitimate differences in judgement aside). Reliability is typically of a lesser importance than validity in qualitative research on the basis that the quantity of data is less and the researcher is more personally linked to the collection and analysis of those pieces of data (George 2009). Furthermore, the focus of the analysis of data is placed on the thickness of description of a (potentially one-off) phenomenon rather than precise reproducibility of the results of the study. Thus, the focus of reliability in qualitative research concerns the reproducibility of the research process rather than replicating results. In this way, Järvensivu and Törnroos (2010) specify that in order to produce credible and reliable research, results must be based on evidence and that the researcher acts in good faith in the conduct of their duty. Yin, R (2009, p.45) suggests the development of case study protocols and databases as evidence of such procedure; both case study protocols and databases are of central importance to my data analysis procedure.

5.3 Institutional data and qualitative content analysis

In order to control unwanted variability introduced by anthropomorphism, I look toward institutional discourse as more credible than individual discourse in reflecting broader society's values toward dogs. This section introduces considerations of institutional data and how that data is analysed to formulate an image of planning for dogs.

Describing documents as institutional data

Planners themselves and each council more broadly have a discourse of their own reflected in many kinds of document. These documents represent traces of governance, the remnants of human interactions with the urban form as mediated by councils and are a credible reflection of the recognition which planners provide dogs. Common document types include council and committee meeting agendas, minutes and papers, and policies, plans and strategies. Every council meets frequently and provides a repository of publicly-available information that traces each council's decision-making over time, across all issues. Under regulations 12(b)-(c) of the *Local Government (General) Regulations 2015* (Vic.), councils are required to allow the public to freely access the preceding 12 months of meeting discourse, however almost all councils routinely exceed this minimum requirement. Where available, up to five years of documentary data was sourced for each council in my sample. The staged process and outcomes of documentary data analysis are described in Table 3:

Step	Activity undertaken	Outcome delivered
1	Retrieval of documents: Meeting discourse including agendas, minutes and papers, along with other referred policies, plans and strategies of council are gathered and catalogued from each council in my sample.	A database is built capturing 9,268 records from up to five years ending December 2013. Where a council study reports findings from earlier work in 2014, I have selectively included those documents as part of this step.
2	Retrieval of textual segments: All agendas and minutes were analysed for references to dogs in the urban environment. This analysis was not based on specific keywords or codes, rather on themes where dogs enter institutional discourse (see Chapter 6). This informs what kinds of textual segments are extracted from council discourse and, importantly, what kinds of data are omitted.	Relevant text is extracted from along with associated metadata from the available agendas, minutes, papers, and referred policies, plans and strategies. Of the total available documents, around 1 in 25 were deemed relevant to my thesis and worthy of detailed analysis. Selected metadata corresponding to these 393 documents is provided in Appendix 3.
3	Qualitative content analysis: The procedure adopted to analyse documentary data is described in Table 5 on page 95.	The qualitative content analysis procedure delivers a library of codes and memos corresponding to each textual segment.
4	Creation of interview materials: Interview materials were prepared based on a critical review and consolidation of themes arising from the qualitative content analysis of documentary data.	Talking points, specific questions and comprehensive background material for each council are constructed from the analysis of documentary data.

Table 3: The process and outcomes of incorporating institutional data as documents (source: author).

Describing interviews as institutional data

Documents form a representation of the position of the institution on a particular issue at a certain point in time. Their description of what, how, who, where, when and why can be objectively clear or, conversely, require a degree of judgement or interpretation. The nature and extent of omitted matters is sometimes as important as what is included and the reasons for omission and inclusion of particular matters are not always evident from the documents alone.

In order to address this limitation, 28 semi-structured interviews were undertaken with both council and Victorian government representatives, these interviews together covering animal management, open space planning and urban planning disciplines; the distribution of interviewees by institution and profession are detailed in Appendix 4. The detailed scope and content of each individual interview was heavily informed by the earlier analysis of documentary data together with my operationalisation of justice for dogs in Chapter 6. Together, these lead to a rich, contextually sensitive interview content that explores the issues of relevance to the management of and planning for dogs in practice. Analysis of the interviews works to both corroborate and challenge observations and conclusions drawn from analysis of the documentary data. The staged process and outcomes of interview data analysis are described in Table 4:

Step	Activity undertaken	Outcome delivered
1-4	Documentary data retrieval and analysis: See Table 3 on page 91.	Preparation of contextually-sensitive interview materials relevant to each council.
5	Transcribe interviews into template: An Excel workbook was established which captured each textual segment (turn) from each interview. Detailed metadata was added to each textual segment to ensure accurate identification during data analysis.	A database of 5,908 textual segments was created, corresponding to over 240,000 words of raw transcript.
6	Qualitative content analysis: The procedure adopted to analyse interview data is described in Table 5 on page 95.	The qualitative content analysis procedure delivers a library of codes and memos corresponding to each textual segment.
7	Grounded theory formulation: Grounded theory emerges from the critical consolidation of codes and memos which correspond to individual textual segments.	Theory emerges from this critical consolidation work, this theory informing key milestones in the narrative of planning for dogs.

Table 4: The process and outcomes of incorporating institutional data as interviews (source: author).

Qualitative content analysis

The subjects of my deductive and inductive inferences are actors in the social world, each having different values and beliefs about the world. Their actions are inherently interpretive which leads toward methods which are similarly interpretive. The research problem and questions lend themselves to a relativist ontology, this guiding the choice of data and method to explore the phenomena of interest (i.e., the inseparability of methodology and ontology in Hall (2003)). The textual data, both documentary and interview, is an accumulation of individual ideas about how planning for dogs ought to work. The knowledge I develop through this research is an amalgam of the ideas of others and my own perspective, leading to a subjectivist epistemology (Lincoln, Lynham & Guba 2011).

Documents are the ‘textual units’ of Krippendorff (2004) and in the context of my study can be an entire text (e.g., a *Domestic Animal Management Plan*, an interview transcript, etc.) or part of a text (e.g., a specific agenda item, paper or minute from a council meeting, etc.). Clearly irrelevant matter from the collection of available documents is discarded to reduce the overall analysis task and focus the research activity on addressing the research questions rather than any peripheral matters (Böhm 2004, p.271; Corbin & Strauss 2008, p.113); in this way, the data undergoes sanitisation prior to inclusion in analysis.

Qualitative content analysis uses texts to develop a naturalistic account of a phenomenon (Hsieh & Shannon 2005). Qualitative content analysis is both inductive and deductive, with ‘how do’-type questions leading to inductive theory building and ‘can’-type questions leading to deductive theory from earlier results (George & Bennett 2005, ch.4), these being appropriate to theory-guided exploration of textual data (Kohlbacher 2006). Krippendorff (2004, p.89) describes the qualitative content analysis process as an interpretive art, producing a narrative that answers the research questions with support of the textual data and literature. In contrast, Mayring (2000) describes the process as one of ‘empirical and methodological control’. The two approaches demonstrate substantial similarity in purpose with a nuanced emphasis of prescription versus abstraction, akin to the research lying on a scale from a systematic science (such as Mayring and Kohlbacher) to an interpretive art (such as Krippendorff). The narrative

develops over time, in multiple iterations, as the researcher's understanding develops through the process of questioning and comparing the data units to other knowledge.

Coding and memo-writing are the foundation of a qualitative data analysis process, with codes describing the data conceptually and memos describing relationships between concepts, helping the researcher navigate towards explanation and theory (Böhm 2004, p.271). Approaches to coding include the following:

- **Open coding:** A completely open approach to coding relies on inductive examination of the raw data to inspire coding. Corbin and Strauss (2008, p.58) highlight the importance of asking questions and making comparisons when beginning the process of coding from scratch, consistent with the conventional approach of Hsieh and Shannon (2005) and the inductive approach of Elo and Kyngäs (2008) to qualitative content analysis.
- **Provisional start list:** In contrast, Miles and Huberman (1994, p.58) prefer a 'provisional start list' of codes be derived from the scholarly literature, this list however being modified during data analysis. Typically this start list will consist of 12-60 codes.
- **Mid-range schemes:** A number of schemes are suggested by Miles and Huberman (1994, p.61) to deductively inspire a (smaller) starting list of codes, a common approach being a 'simple two-level scheme' which begins with a set of deductive 'etic' codes ('macro phenomena') and inductive 'emic' codes ('micro phenomena').

To analyse both documentary and interview texts, I adopt a simple two-level 'etic-emic' approach (similar to the mid-range scheme above) as a means to ultimately generate grounded theory and capture any new and novel dimensions which might emerge from a naturalistic analysis of the data. My analysis begins by developing a set of umbrella categories which are deduced from the broad component themes arising from my operationalisation of justice for dogs in Chapter 6 (see Table 10 and Figure 1 in particular; pages 113 and 114). After establishing these component themes and umbrella categories (equivalent to the 'etic' codes above), the 'emic' codes inductively draw from the texts themselves. As a result, the data then largely speaks for itself, rather than having previous scholarly work speak on its behalf (the inductive theory building of George and Bennett (2005, ch.4) and the interpretive art of Krippendorff (2004, p.89)).

This approach is summarised in Table 5:

Step	Activity undertaken	Outcome delivered
1	Create umbrella categories from component themes ('etic' codes): The component themes emerge from my operationalisation of justice for dogs in Chapter 6.	A coding scratchpad was created which documented the 'etic' categories and themes, suggesting appropriate search terms to apply to the database.
2	Development of 'emic' codes and memos: An inductive qualitative content analysis was undertaken of the extracted text to develop 'emic' codes and detailed memos as the critical analysis of each textual segment took place.	The list of 'emic' codes was created inductively from scratch. Each code was rigorously defined and periodically the list was cleaned. The memos are the beginning of theory building.

Table 5: Generic qualitative content analysis procedure applied to all textual data (source: author).

This naturalistic, iterative data analysis procedure leads to the eventual generation of grounded theory and a robust narrative; a discussion of the grounding of theory forms the final section of this chapter.

5.4 Grounding theory

Theory is an explanation of why things take place the way that they do, going beyond a description of a concept or phenomenon. Grounded theory arises out of these explanations. Corbin and Strauss (2008) suggest two initial phases of analysis of data to move towards a grounded theory. Data initially undergoes critical questioning to tease out its true and plural meanings, this analysis taking place within that data (that is, not external to that data). Once a critical mass of data has undergone initial questioning, comparisons between data (constant comparisons) and to other external phenomena and understandings (theoretical comparisons) take the understanding to a new level, shifting coding from description (within data) to abstraction (across data) and towards a grounded theory.

Corbin and Strauss (2008) unbundle context into three distinct components: conditions, process and consequences. Conditions are a static representation of how things are now. Process defines an interaction between actors that causes the conditions to change, a transformation which results in a consequence. Each component is dependent on the preceding components and in this way the conditions can be viewed recursively over time; accumulating traces of process then reflect changing conditions. In the long-term, understanding the context can therefore take the form of either understanding the

conditions or understanding the process that led to and acts on those conditions. In other words, how things are now is an amalgam of how things have changed over time, historically. In the short-term however, the initial condition and the process for change mutually define the conditions in the future and the consequences of action. Given my study is over a relatively short timeframe, it is important for me to understand both the initial conditions (the current urban environment) and the process of change (the process of planning) to understand context. As a further complication, my own role as researcher introduces a disruptive layer of bias and assumption which needs to be critically acknowledged and subject to a robust, reflexive critique throughout the analysis process.

My core data consists of institutional texts (both documents and interviews) which reflect the traces that reflect these conditions and processes. According to Corbin and Strauss (2008), any condition or process can be interpreted on any scale of interaction and along any dimension. The condition or process itself is the concept (or code), understood through the data individually and collectively. The concept is then understood critically through a number of dimensions (or contexts). These understandings are the outcomes of the data analysis and, taken into abstraction, provide a path towards new theory.

Theoretical saturation is an abstract concept which is broadly indicated by stability in (emic) code and memo generation, with 'enough' data having been gathered and 'enough' analysis taken place to explain each category can be described and explained over all relevant properties and dimensions or contexts (Corbin & Strauss 2008, pp.106 & 113; Miles & Huberman 1994, p.74). In my study with a relatively small number of cases, the addition of new councils would almost inevitably add new and interesting information. In order to operationalise the concept of theoretical saturation in this circumstance, I translate theoretical saturation from a concept applying across councils to one within councils through the methodical introduction of comparable data from experts aligned with my operationalisation of justice for dogs in Chapter 6, these experts being animal management officers, open space planners and urban planners, alongside documentary artefacts from council. Once these texts are understood in and of themselves and in the context of other texts from within and across different councils in my sample, theoretical saturation is deemed to have taken place.

To implement this approach, I create a robust theoretical analysis framework which reinforces the importance of institutional ontology to planning for dogs. Institutional ontologies are introduced in Chapter 8 and the applied sampling and methodological frameworks are developed in Chapter 9, these forming the foundation of my exposition of planning for dogs in urban environments in Part V and enabling the emergence of grounded theory.

6. OPERATIONALISING JUSTICE FOR DOGS

Indicators are the instinctive way humans simplify the world into manageable chunks, the manifestation of our cognitive associations (Bossel 1999, p.9). Much research seeks to perform some kind of comparison or association, leading to a need for a way to measure those differences. Indicators are commonly used in research to describe a baseline for comparisons, to measure the efficacy of actions and policies, and to forecast future changes (McCool & Stankey 2004), a means to improve our understanding of a particular underlying phenomenon. Indicators are not always straightforward to define however, with justice for dogs proving no exception; indeed, the difficulty in developing indicators of less measurable phenomena makes the process of developing indicators particularly critical to understand.

This chapter follows a linear path to describe my process of operationalising justice for dogs through the development of a set of capabilities and indicators, culminating by describing what a multidisciplinary planning for dogs might comprise in practice and providing an overarching framework guiding the semi-structured interviews. Accordingly in section 6.1, I begin by describing a set of fundamental ‘orientors’ found in natural systems as a precursor to developing a set of indicators and themes of justice for dogs. I then proceed in section 6.2 to define in detail what justice for dogs means in practice, this work underpinning my articulation of notional canine capabilities. Section 6.3 sees the development of a notional set of indicators, this arising from a careful cross-tabulation of the fundamental orientors and capabilities of earlier. The validity of these indicators is examined by reference to empirical literature. In section 6.4, I conclude by examining the role which humans play in providing for just outcomes for dogs through enabling opportunities for dogs to achieve their innate capabilities, whatever those may be.

6.1 Towards a justice for dogs I: difficulties of measuring the less measurable

Indicators are naturally subjective, bringing a researcher’s set of values and ideologies to the forefront (Bossel 1999, p.24). Much recent work has focused on developing sets of indicators to measure environmental sustainability, this debate identifying many issues inherent in measuring the less measurable. Bell and Morse (2008, p.81) highlight this problem with a sample set of sustainability indicators that use the term ‘community spirit’, concluding the term is nebulous. As a further example, a United Nations report

on sustainability indicators measures the ‘effectiveness of management’ by breaking the problem into a number of composite parts. Each part contributes to an overall picture of ‘effectiveness of management’, the composite indicator based on six underlying drivers of context, planning, inputs, processes, outputs and outcomes (UN 2007, p.228). The UN report does not describe a deterministic formula for measuring a nebulous concept like ‘effectiveness of management’, rather it suggests indicators that lead an observer to conclude some condition as being better or worse than another condition, with the composite indicator the subject of opinion and consensus.

A number of researchers support a systems approach for the development of indicators to describe complex and messy real-world phenomena in the sustainability space (Bell & Morse 2008; Bossel 1999; McCool & Stankey 2004; van Bueren & Blom 1997). Bossel (1999, pp.27-8) describes (natural) environmental systems as consisting of a normal state, resource scarcity, variety, variability, change and exogenous systems, attempting to describe how the system exists in time and space. The UN approach to indicator construction interestingly focuses instead on how the system works.

In the case of creating a set of indicators for justice for dogs, I have chosen to focus on the existence of a system rather than how the system works on the basis that the question of whether justice for dogs exists and under what conditions it might exist are central concerns of my research problem (see Chapter 1) and precede any question of how any such system may work in practice. I return to the question of how justice for dogs might work as an applied philosophy in some depth in my discussion and conclusions in Chapter 14.

Bossel (1999, p.25) introduces the term ‘orientor’ to describe a set of precursor motivations, the interests, values, criteria or objectives that guide how indicators are selected. The orientors suggested by Bossel (1999, p.31) consist of six fundamental criteria that exist in any environment and three additional criteria that are specific to certain environments (Table 6):

	Characteristic properties	Basic orientors
Environment-determined	Physical properties	Existence
	Resource scarcity	Effectiveness
	Diversity and variety	Freedom of action
	Variability	Security
	Change	Adaptability
	Other systems	Coexistence
System-determined	Self-reproducing systems	Reproduction
	Sentient beings	Psychological needs
	Conscious beings	Responsibility

Table 6: Environmental properties and basic orientors (source: adapted from Bossel (1999, p.31))

These orientors alone are inadequate to understand justice for dogs. The development of indicators, or even orientors that point to indicators, must be preceded by an agreement of the nature of the problem or issue being addressed (McCool & Stankey 2004). In other words, I need to return to my working definition of justice for dogs in order to understand the meaning of the orientors in the context of justice for dogs.

6.2 Towards a justice for dogs II: applying justice and capabilities to dogs

Defining justice for dogs

The essential elements of my research concern the overlap between planning for dogs *as a process* and justice for dogs *as an outcome*. Some important considerations arise in considering an applied philosophy of justice for dogs, primarily concerning the meaning and measurement of justice for dogs and the role of planners in delivering just outcomes for dogs. Returning to my research problem, I begin revisiting the definitions of justice for dogs introduced in Chapter 1: justice as liberty, justice as language and action, justice as authenticity and justice as capability.

Justice as liberty describes the extent to which dogs enjoy freedom of integration and interaction with their environment and community in ways and extents that they want. This enjoyment includes both spatial freedom (e.g., off-leash parks) and expressive freedom (e.g., barking, play and socialisation opportunities). Justice as language and action is perhaps a precursor to liberty, it concerns how we speak about and act towards dogs as a council and as a community. It is possible to develop indicators of justice as liberty, language and action to enable some measurement to take place, albeit such indicators are necessarily subjective and relative. Justice as authenticity and capability represent two wicked problems for humanity ('wicked' cf. 'tame' in the sense of Rittel

and Webber (1973)), it being impossible to develop and agree upon a definitive set of indicators as a basis for human decision-making.

The different forms of justice afforded to dogs therefore have a temporal order to them. Justice as language and action is the precursor to other forms of justice. If we do not speak of dogs or act toward dogs in the spirit of justice then we frustrate our ability as humans to afford other forms of justice to dogs in urban environments downstream. Justice as liberty is a direct consequence of language and action, whereby dogs that are spoken of and acted toward more justly should logically have greater opportunities to exercise freedoms. That is to say, justice as language and action has led to greater opportunities for justice as liberty. In turn, these lead to greater opportunities for justice as authenticity and justice as capability to arise in due course.

Unlike theories of justice for humans where the rights are not questions for councils, the rights of dogs *are* questions for councils. This is indicative of a lack of societal agreement in how we ought to plan for dogs, so we therefore lack a consensus for what justice for dogs ought to look like when planning. Although this work will never be complete since humans have limited abilities to know or experience what it is like to be a dog (see Chapter 3), this chapter nevertheless endeavours to develop a robust, defensible and importantly operationalisable conception of justice for dogs in order to frame my study of the multidisciplinary practice of planning for dogs.

Establishing a set of capabilities for dogs

Providing dogs with the opportunity to realise their potential capabilities underpins my definitions of justice for dogs. If dogs are allowed the freedom to pursue their capabilities, this will ensure they have the opportunity to live an authentic life and a life that is worth living. In turn, they will have freedoms to pursue goals that are important to them, including love, to live without fear, play, to live in harmony, to have integrity and dignity.

Nussbaum (2011) describes a set of central human capabilities where no single capability is any more or less important than any other, “[focusing] on the protection of areas of freedom so central that their removal makes a life not worthy of human dignity” (2011, p.29). In considering the capabilities of other species, Nussbaum describes the importance of normative theory building through the observation and

description of their actual capabilities in practice (2011, pp.28-9). There appears however no way to directly control anthropomorphism through such a program of theory building. In order to limit the problem posed by anthropomorphism in the act of normative theory building, I choose to instead adapt the central human capabilities of Nussbaum in such a way as to conceive some equivalent for dogs on the basis that dogs each have a life and that their lives are worth something of value to them. This equivalence is described in Table 7 which follows:

Central capability	Human capability (source: reproduced from Nussbaum (2011, pp.33-4))	Dog capability (source: adapted by author from Nussbaum (2011, pp.33-4))
Life	Being able to live to the end of a human life of normal length, not dying prematurely or before one's life is so reduced as to not be worth living.	Living a complete life, living a life that is worth living
Bodily health	Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.	Being in good health, having access to essential resources of food, water and shelter
Bodily integrity	Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.	Being free in society, being protected from harm, able to defend one's self
Senses, Imagination, Thought	Being able to use the senses, to imagine, think, and reason - and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical/scientific training. Being able to use imagination and thought in connection to experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain.	Living life as a dog, authentically. Having adequate canine mental stimulation

Central capability	Human capability (source: reproduced from Nussbaum (2011, pp.33-4))	Dog capability (source: adapted by author from Nussbaum (2011, pp.33-4))
Emotion	Being able to have attachments to things and people outside ourselves, to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)	To love and to be loved, to live without fear or anxiety
Practical reason	Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)	No equivalent
Affiliation	(A) Being able to live with and toward others, to recognise and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech). (B) Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.	To belong to a pack
Other species	Being able to live with concern for and in relation to animals, plants, and the world of nature.	Live with other animals, humans and with nature in peace and harmony
Play	Being able to laugh, to play, to enjoy recreational activities.	Having adequate canine recreational stimulation, to have fun with humans and other animals

Central capability	Human capability (source: reproduced from Nussbaum (2011, pp.33-4))	Dog capability (source: adapted by author from Nussbaum (2011, pp.33-4))
Control over one's environment	(A) Political: Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (B) Material: Being able to hold property (both land and moveable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.	No equivalent

Table 7: Human and canine capabilities (source: Nussbaum (2011, pp.33-4) and adaptation).

These canine capabilities derive from a simple equivalence mapping from human capabilities. In order to gain some assurance of their appropriateness, I compared the set of canine capabilities to the ‘five freedoms’ shown in Table 8. These form a charter developed by the Farm Animal Welfare Council of the United Kingdom and used by the RSPCA Australia as a baseline standard to improve farm animal welfare in Australia:

1. Freedom from Hunger and Thirst...	...by ready access to fresh water and a diet to maintain full health and vigour.
2. Freedom from Discomfort...	...by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from Pain, Injury or Disease...	...by prevention or rapid diagnosis and treatment.
4. Freedom to Express Normal Behaviour...	...by providing sufficient space, proper facilities and company of the animal's own kind.
5. Freedom from Fear and Distress...	...by ensuring conditions and treatment which avoid mental suffering.

Table 8: Five freedoms (source: Farm Animal Welfare Council (2007); also used by the RSPCA Australia (2014, p.5) in their Approved Farming Scheme).

This concordance provides some comfort that my justice-based approach to developing a set of capabilities for dogs in urban environments is comprehensive.

A limitation of my approach is that it fails to identify any canine capabilities that do not have a human equivalent. In other words, it fails to address the question of what dogs may be capable of for which there is no equivalent in the human species. I am uncomfortable pondering answers to such metaphysical questions as it requires me to understand innately what it is like to live within another species' skin or thoughts, something which can only begin to be understood, if at all, through disciplined ethological research (see Midgley (1998, pp.38-9) and Chapter 3). The fundamental and comprehensive nature of Nussbaum's set of human capabilities reduces the likelihood that critical aspects of a dog's existence are being overlooked and, indeed, ought to provide a sound basis to examine planning for dogs in practice (Garner 2013, pp.111-2), however it is important to acknowledge that this inherent limitation nevertheless exists.

6.3 Towards a justice for dogs III: applying indicators and themes to justice for dogs

Developing a notional set of indicators and themes representing justice for dogs

In order to operationalise the canine capability set in Table 7, I have cross-tabulated each canine capability against each basic orientor from Table 6. This constructs a bridge from the concept of canine capability (as a proxy for justice for dogs) to the urban environment in which dogs live (with characteristic properties and associated orientors), paving a path toward indicators of justice for dogs which exist in the urban environment. The results of this work are the 'objectives derived from orientors' shown in Table 9, these objectives leading to a provisional set of indicators and themes that provide a practical link between justice for dogs and planning for dogs by council:

Capability	Life
Description	Living a complete life, living a life that is worth living
Objectives derived from orientors	Capability to exist Capability to experience Euthanasia Animal welfare Desexing
Drivers	Composite of other drivers
Indicators	Composite of other indicators
Key themes for council	Overpopulation and euthanasia policies and plans

Capability	Bodily health
Description	Being in good health, having access to essential resources of food, water and shelter
Objectives derived from orientors	Being in good health Being clean Frequently walked Self-controlling consumption of food and water (e.g., grazing behaviour) Adequate access to food, water and shelter Access to a clean, warm, dry environment Veterinary care
Drivers	Responsible dog ownership
Indicators	Responsible dog ownership in the community (a range of measures) Registration compliance rates Educational approach (through an education-compliance-enforcement spectrum)
Key themes for council	Responsible dog ownership Educational approach to animal management Registration
Capability	Bodily integrity
Description	Being free in society, being protected from harm, able to defend one's self
Objectives derived from orientors	Access to a dignified life Being free in society Taking care of self and pack Free access to defensive mechanisms Protection from harm
Drivers	Respecting dogs as a species with their own needs Speaking of dogs in a dignified way
Indicators	Open space (accessibility, type) (a range of measures) Attitude towards dogs (off-leash, barking) (a range of measures) Enforcement approach (through an education-compliance-enforcement spectrum)
Key themes for council	Open space Enforcement approach to animal management Overpopulation and euthanasia policies and plans
Capability	Senses, imagination and thought
Description	Living life as a dog, authentically. Having adequate canine mental stimulation
Objectives derived from orientors	Living an authentic life Having self-control Confidence to be a dog Ability to learn and be adaptive Opportunity for learning Having adequate canine mental stimulation, to not be bored Obedience training
Drivers	Giving dogs freedoms, basic freedoms to be a dog Giving dogs attention and time

Indicators	Community tolerance for obedience training (a range of measures) Obedience schools in area Open space (accessibility, type) (a range of measures) Educational approach (through an education-compliance-enforcement spectrum) Enforcement approach (through an education-compliance-enforcement spectrum)
Key themes for council	How councils manage dogs Open space
Capability	Emotion
Description	To love and to be loved, to live without fear or anxiety
Objectives derived from orientors	To love and to be loved To have a name Free to express emotions (wagging tail, showing fear) Innate protective mechanisms To provide an environment without fear or anxiety Belonging to a pack Exposure to different environments Exposure to different animals and humans
Drivers	Respecting dogs as a species with their own needs Speaking of dogs in a dignified way
Indicators	Registration compliance rates Responsible dog ownership (a range of measures)
Key themes for council	Overpopulation and euthanasia policies and plans Inclusion of dogs in the community
Capability	Affiliation
Description	To belong to a pack
Objectives derived from orientors	To belong Confidence of pack Safety of pack Taking care of self and pack Learning from pack, teaching pack Pleasing master (human owner) Develop social connections with human and animal pack
Drivers	Self-confidence Reliance on others Building social connections Community tolerance for pack behaviours
Indicators	Community tolerance for obedience training (a range of measures) Obedience schools in area Open space (accessibility, type) (a range of measures) Educational approach (through an education-compliance-enforcement spectrum) Responsible dog ownership (a range of measures)
Key themes for council	How councils manage dogs Open space Inclusion of dogs in the community

Capability	Other species
Description	Live with other animals, humans and with nature in peace and harmony
Objectives derived from orientors	To live with others in harmony (animals, humans, nature) Protecting others from detriment Responsible dog ownership
Drivers	Being responsible Reducing conflict
Indicators	Dogs under effective control Compliance approach (through an education-compliance-enforcement spectrum) Responsible dog ownership (a range of measures) Community discourse through the council (a range of measures) Council's reflection of that discourse in their actions (a range of measures) Deliberative planning (how it plays out) (a range of measures)
Key themes for council	Responsible dog ownership Deliberative planning Compliance approach
Capability	Play
Description	Having adequate canine recreational stimulation, to have fun with humans and other animals
Objectives derived from orientors	To have fun with humans and other animals Having adequate canine recreational stimulation
Drivers	Giving dogs space Giving dogs time
Indicators	Attitudes towards dogs (off-leash, barking) (a range of measures) Open space (accessibility, type) (a range of measures)
Key themes for council	Open space Inclusion of dogs in the community

Table 9: Indicator development from cross-tabulating capabilities and orientors (source: author, in part using frameworks adapted from Bossel (1999, pp.27-31) (see Table 6) and Nussbaum (2011, pp.33-4) (see Table 7)).

This indicator development process operationalises justice for dogs within a context of planning for dogs at councils, leading to establishing a set of key themes (Table 9). These themes then form a basis for semi-structured interviews with animal management officers, open space planners and urban planners from both councils and the Victorian government, thus operationalising the idea of justice for dogs in the context of planning for dogs in urban environments.

Validating the notional set of indicators and themes representing justice for dogs

The nature of the suggested indicators and themes relate to real-world phenomena which councils have influence over. Validation of these indicators against the proposition of justice for dogs presents particular challenges. Bockstaller and Girardin (2003) describe three types of indicator validation as design validation (scientific

foundation), output validation (realistic) and end-use validation (usefulness). Some indicators and phenomena are not configured for empirical validation and the paper suggests, for these, that “global expert validation” (2003, p.649) takes place. Karlsson (2012) describes the lack of philosophical consensus, past and present, on questions of anthropomorphism, suggesting that over time norms may emerge which encapsulate how humans ought to consider animals and their experience; however until such a point, arguably such ‘global expert validation’ will lack meaningful consensus and thus validation power.

Meul, Nevens and Reheul (2009) however suggest semi-structured interviewing is an adequate validation technique for qualitative indicators in the social sciences, particularly those indicators that relate to social and cultural phenomena. I undertake semi-structured interviewing to explore how councils plan for dogs by reference to themes identified through the indicator development process (i.e., the process encapsulated in Table 9). The interviews do not intentionally validate indicators; rather, the interviews comprise primary data contributing to my study. The key issue I encounter is that the subjects of the interviews (and their expertise) and subjects of the indicators differ, so that techniques such as semi-structured interviewing will not comprehensively address validation of the measures.

Turning towards naturalistic approaches to validate indicators, Radimer, Olson and Campbell (1990) analyse statements made by women which claimed they had experienced hunger and ground their indicators in the perceptions and experiences of their subjects. I contend that my approach is similar to the naturalistic approach of Radimer and colleagues. In my case, I am relying on Nussbaum’s account of human capabilities and on Bossel’s account of the systematic account of environmental concern. In other words, I see my approach to indicator development as a valid way of capturing justice for dogs in measurable urban phenomena, in the absence of objective measures and philosophical consensus.

My set of indicators, in part, reflects the findings in Opatow (1993). Opatow’s study examined people’s attitudes towards justice for animals in a contrived environment that limited anthropomorphic tendencies of human subjects by focusing their attentions and affections on a particular species of beetle rather than common domestic animals. Opatow examined indicators of resource allocation, fairness, kindness and protective

tendencies towards the beetle in order to examine the question of justice for animals. The indicators that I suggest to examine justice for dogs in the context of the urban environment as shown in Table 9, developed through a mixture of established capability and sustainability indicator frameworks, are remarkably similar in nature to those suggested by Opatow (1993). This concordance in itself provides a degree of confidence that the indicators that I have identified are representative of justice for dogs.

The roles of humans and dogs in shaping justice for dogs

Earlier in Chapter 4, I introduced various constructions of agency as mechanisms which allow humans to afford freedoms to other species. Such agency freedoms provide opportunities for humans to recognise the capabilities of other species, providing frameworks within which justice toward other species can be recognised. On their own however, agency freedoms do not obligate humans to consider justice for other species; our participation in the acts of domestication over centuries nevertheless provide a persuasive argument for an entitlement of dogs to justice in some form. Urban environments can provide opportunities for dogs to live their lives more authentically (whatever that authenticity may mean) and humans acting in agency can provide the freedoms to dogs to have the opportunity to realise those capabilities.

Some capabilities need to be facilitated by dogs themselves. A dog needs to take care of his or her own emotional health and to have unfettered access to defensive and protective mechanisms to maintain bodily integrity. A dog is thrust into their human pack without any say in the matter; however it is the dog's choice to what extent he or she then integrates with their new pack. Conversely, it is a human choice how we treat dogs in our pack, in turn encouraging or discouraging certain learned or innate behaviours and largely driving the dynamic of the pack to suit our needs and desires.

Justice for dogs then depends on who makes what choices and whether it is essential that the dog is able to make choices for justice to be realised or whether humans have agency over the dog and can make choices on their behalf. In my earlier articulation of justice for dogs, I defined justice in four ways, as liberty, as language and action, as authenticity and as capability, prioritising the realisation of capabilities thus allowing other forms of justice to take shape downstream. Capabilities lead to the realisation of important functionings, including allowing individuals to choose to recognise the importance of capabilities of other species and the opportunity to act as their agent. The

development of indicators of justice then directs my attention towards specific themes that are relevant to council.

Public open space and private space are both environments where the dog is offered more choices of their own, thus leading to more opportunities to realise their own capability set without the need for agency. Justice for dogs provides a theoretical justification for focusing on open space as being particularly important to domesticated dogs. In other aspects of their urban existence, dogs largely rely on human agency to realise their capabilities. This underscores the importance of affiliation as being critical to the dog having access to reliable agency to open up opportunities for him or her. Dogs rely on their human companions for bodily health and to be taken care of when they are sick or injured. They rely on humans for representation to gain access to the community, allowing them to exercise their senses, imagination and thought, their emotions, the ability to meet other species, and to play.

Accordingly, there is no need to focus too deeply on the precise make-up of the set of canine capabilities or indicators. The key examinations which I need to undertake aim to understand the spirit of the set of dog capabilities, the spirit of the indicators and the full breadth of spirit of language and action in how councils speak and act towards and on behalf of dogs, providing an image of how justice for dogs plays out in the context of planning for dogs in urban environments.

6.4 Towards a justice for dogs IV: a multidisciplinary planning for dogs

Planning for dogs is truly multidisciplinary and each discipline contributes to the overall plan for dogs in urban environments in different ways. The practice of planning reflects an underlying government ideology; it need not however coincide with any particular community ideology. As such, I conclude that the planner has a greater influence over the physical form and infrastructure compared with social and cultural infrastructure and norms. That being said, the planner still has influence through the decisions they make in driving outcomes that are broadly supportive or dismissive of particular social or cultural outcomes. The question remains whether justice is realised in the doing of planning or the outcome of that planning. The philosophical question posed by planning for dogs concerns a need for government to understand the plurality and polarity of views on canine entitlements throughout the community, that understanding then feeding into the broader, multidisciplinary process underlying planning for dogs.

Where this process has little influence, the dog and the human owner have greatest choice in determining what opportunities are afforded to dogs to help them achieve their potential. Conversely, where this influence is greater, the institution has greater agency over the dog and thus provides him or her with less choice. Any such planning ought to some extent explicitly recognise the importance of urban outcomes which focus on play and affiliation, perhaps aligned with the juvenile temperament of domesticated dogs. Table 10 and Figure 1 represent a mapping from a notional set of canine capabilities to the broader multidisciplinary planning for dogs by examining the role of humans, in particular the multidisciplinary roles of planners, in a domesticated dog's life.

In this chapter, I have placed the idea of justice for dogs into a common urban context. Through the development of a set of notional central capabilities for dogs, the idea of justice for dogs has been translated into a set of indicators which connect the ideas of justice for dogs to both elements in the urban environment (outcomes) and the practice of planning (process). The capabilities and indicators themselves are not measurable in any absolute sense; rather, they provide a stepping stone from the philosophical idea of justice for dogs to the real and practical activities of local government in planning for dogs. The operationalised capability framework, described in Table 10 and Figure 1 below, then ultimately guides the scope and nature of institutional information which I collect and how that information is analysed, in doing so ensuring that the data which I collect and analyse is in strict accord with my core inquiries:

Research Question 1: Through their normative conceptions of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

Research Question 2: In the practice of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

Positive management of the human-dog relationship	In influencing the capability of emotion , humans play less of a day-to-day role. Councils can influence emotion indirectly through their policies on play, affiliation and health, however emotion is perhaps within the realm of the choices a dog makes and the independent choices which humans make in their interactions with dogs. It could be also a complex amalgam of other capabilities, in the same way that life is affected by many different influences.
Normative management of the human-dog relationship	Responsible dog ownership and education: In influencing the capability of health , humans can exercise the wide variety of behaviours consistent with responsible dog ownership. Councils and planners can help this behaviour flourish by educating and promoting behaviours that are consistent with responsible dog ownership. Thus, a council's education and promotion activities are aligned with the canine capability of health.
Positive management of the human-dog environment	Conflict management and compliance: In influencing the capability of other species , humans can provide opportunities for responsible exposure of dogs to a wide variety of stimuli, including other dogs and humans, together with other species found in the urban environment like cats, birds, rabbits and possums. Councils and planners can help facilitate these interactions through regulating the ways dogs interact with the community through local laws and compliance, managing conflict and balance.
Normative management of the human-dog environment	Community tolerance and enforcement: In influencing the capabilities of integrity, senses, imagination and thought , humans define how tolerant they are of dogs in the community in a number of ways by making a number of choices in agency for dogs. These include the decisions of how local laws and regulations are enforced; how opportunities for dogs to exercise freedoms are provided; and how the issue of overpopulation and euthanasia is managed. These attitudes are guided by the position of the community on a scale of humanism to animal liberalism, with planning on a spectrum of rational to deliberative. Community tolerance facilitates the capabilities of integrity, senses, imagination and thought by creating an environment with freedoms for dogs to be themselves.
How planners plan the human-dog environment	Open space planning: In influencing the capabilities of play and affiliation , humans can choose what land to set aside for use by dogs for the purposes of play and socialisation. Planners reflect the appetite of the community for these kinds of spaces in both land use and open space planning, providing the opportunity for dogs to function in play and to freely affiliate with other dogs in the broader community. This appetite is a product of community tolerance and the balance of conflict and harmony. In this sense, open space planning drives capabilities of other species, integrity, senses, imagination and thought and facilitates play and affiliation.

Table 10: Mapping capabilities of dogs to planning functions and outcomes (source: author).

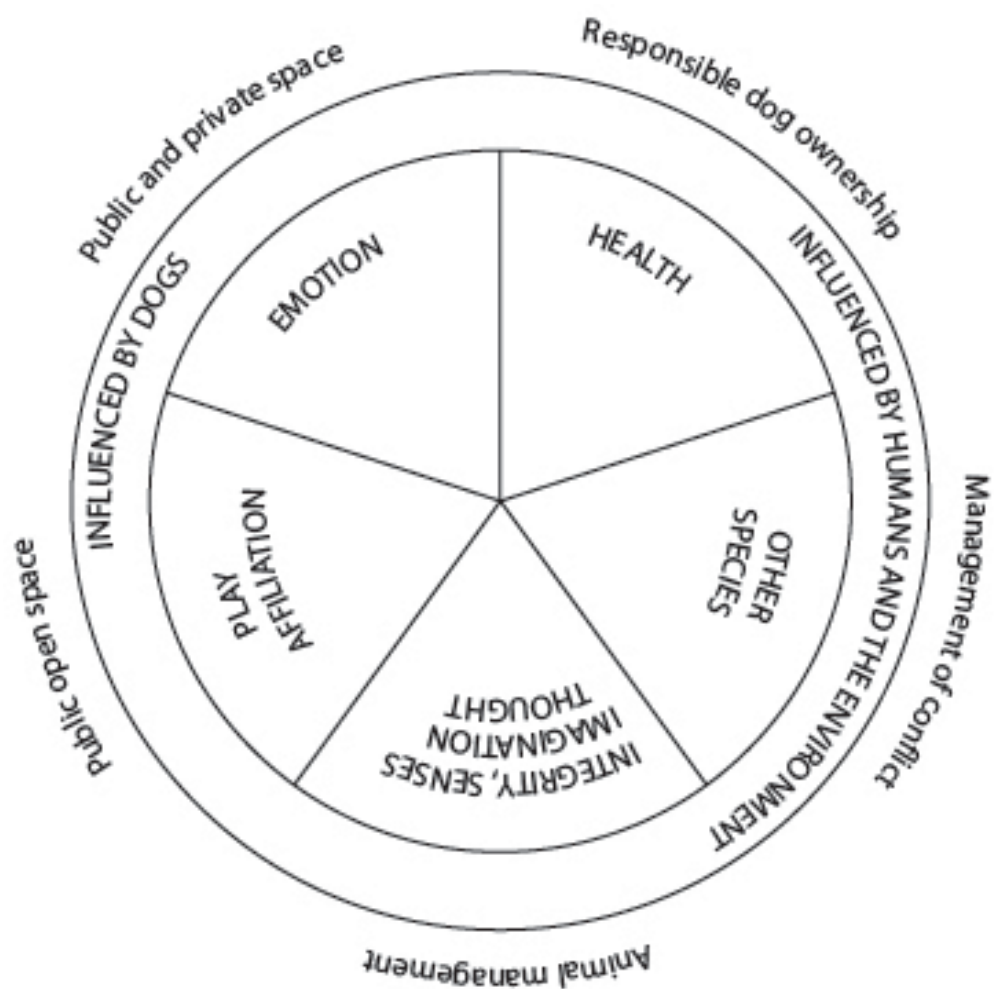


Figure 1: Mapping capabilities of dogs to planning functions and outcomes. A notional set of canine capabilities are in the centre, these being mapped to functions of management and planning at council (source: author).

PART IV: METHODOLOGY II: IMPLEMENTATION IN A MELBOURNE CONTEXT

7. THE ENVIRONMENTS OF PLANNING FOR DOGS

Part IV situates the methodology in the context of planning for dogs in Melbourne, describing how the theoretical methodology framework described in Chapters 5 and 6 is implemented in practice. Over the course of the next three chapters, I develop sampling and analysis frameworks which form the basis for my exposition of planning for dogs in urban environments in Part V.

According to Tarsitano (2006), cities are a human construct, designed by humans and for humans. Gaunet, Pari-Perrin and Bernardin (2014, p.384) describe the general integration of dogs in urban environments as a paradox, or a “geographical schism”, where governments are torn “between integrating dogs into urban life and the current legal construct that forces them to be regulated by way of separate places or practices”. In Victoria, the integration of dogs in urban environments falls within the remit of the *Domestic Animals Act 1994* (Vic.) and is most commonly described as a governmental function of ‘animal management’, this choice of terminology reflecting a pervasive hierarchical distinction between humans and dogs throughout society. Despite this, councils integrate dogs in differing ways and to differing extents, a study of these animal management activities leading to a rich source of information on how councils and, in turn, the communities they represent integrate dogs into their lives.

In section 7.1, I begin by examining the plentiful quantitative and spatial data that describes physical and demographic aspects of each council, its scope largely drawn from the attributes of dog ownership and planning for dogs earlier in Table 2 (page 87). These examinations focus on identifying and explaining correlations between these attributes, identifying preliminary environmental clusters and sketching a narrative that shapes part of the sampling framework.

Following this analysis, in section 7.2 I turn my attention towards institutional aspects of each council. To begin, I focus on locating drivers to determine the approximate true population of dogs. Determining the rate of non-compliance and addressing this transgression through council activities and programs is important for a number of reasons. By estimating the true population of dogs in their communities, councils are able to better resource their animal management function in the interests of the broader community and the welfare of dogs. Importantly, understanding the true population of dogs also provides insight of the level of non-compliance with registration and, in turn,

provides a representation of the general level of responsible pet ownership in the community. A number of councils argue that responsible pet ownership and registration intertwine, the importance of responsible pet ownership and thus registration compliance described succinctly by one council:

“Responsible pet ownership is the key to a healthy relationship between dogs and the wider community in which they live.” – City of Glen Eira (2013, p.16)

In section 7.3, I turn to examine public open space provision for dogs. Public open spaces host some of the most important interactions dogs have with the community and crucially these spaces provide opportunities for both play and affiliation to flourish, these being two notional canine capabilities derived in Chapter 6. Each council provides different amounts of public open space, both in terms of the number of spaces and land area, ranging from parks purpose-built for dogs to green space that is completely off-limits. For the purposes of planning for dogs in the community, both the number and size of public open spaces is important to enable owners and their dogs to easily reach parks without needing to travel by car, particularly for elderly and physically handicapped residents. The result of this analysis is a rank list of councils based on the provision of public open space for dogs in their communities.

7.1 Quantitative and spatial data describing dogs in Melbourne

Councils are institutions that are dependent on and producers of quantitative and spatial data. At a federal level, the Australian Bureau of Statistics collects demographic and socioeconomic data through its five-yearly census and other intermittent surveys, providing a comprehensive snapshot of a municipality at a point in time. Other federal agencies such as the Department of Infrastructure and Regional Development, the Department of Employment, the Department of Health and the Department of Social Services provide statistics and research that assist councils in planning various services for their municipality.

At a state-level, a number of authorities exist that feed information into the urban planning process. The Department of Transport, Planning and Local Infrastructure provides the framework for urban planning in Victoria and, particularly along the urban-rural interface, the Metropolitan Planning Authority provides a blueprint for expansion of the metropolitan area. Land Victoria provides cadastral and geographic data that assists councils in understanding their municipalities from a spatial perspective. In

respect of animal management, the Department of Environment and Primary Industries provides animal management guidance to councils through the Bureau of Animal Welfare³.

Councils use an amalgam of this data to help them plan municipal services and draw cross-sectional comparisons with other councils. Councils in turn are producers of quantitative data; in the context of animal management, this includes records of registration, complaints, attacks and impoundments published in each *Domestic Animal Management Plan* ('DAMP'). Council data also includes how it provides local facilities and services, a recurring subject of analysis in the remainder of Chapter 7 and throughout Chapter 8. This section endeavours to critically examine this data with two primary objectives. Firstly, the data may suggest avenues of inquiry for later chapters to consider and, secondly, the data provides a means to develop a sample by understanding a cross-section of the Melbourne community.

The 2011 Census contains a rich source of data regarding each council area. The Census is a powerful secondary source of cross-sectional data on a wide range of demographic and socioeconomic attributes. Supplementing this information are attributes sourced from councils which relate to dog population and some measures of public open space alongside cadastral data sourced from Land Victoria. A summary of this data by attribute and source is found in Table 11 which follows:

Attribute	Description	Source and units
Area ^a	Total land area	2013 Land Victoria, Cadasta, Sum([Area]), sq kms
AreaParks ^a	Total land area zoned for public parks and recreation	2013 Land Victoria, Cadasta, Sum([Area]), sq kms, zoned PPRZ
AreaPkCv ^a	Total land area zoned for public parks and recreation, and conservation reserves	2013 Land Victoria, Cadasta, Sum([Area]), sq kms, zoned PPRZ or PCRZ

³ In late 2014, the Victorian government changed office and the new government has since reorganised a number of government departments and their responsibilities. The Department of the Environment and Primary Industries (DEPI) and the planning functions of the Department of Transport, Planning and Local Infrastructure (DTPLI) have ceased to exist and been absorbed by the new Department of Environment, Land, Water and Planning (DELWP). As my interviews and other data gathering were undertaken prior to this reorganisation taking effect, those interviews and data were deemed to represent the views and practices of the former departmental structure and thus the disestablished department names and abbreviations are maintained consistently throughout this thesis.

Attribute	Description	Source and units
Attack ^b	Approximate number of dog attacks in 2011	Number of dog attacks from the <i>Domestic Animal Management Plan</i> of each council in a year
AuthOfficer ^b	Number of authorised officers in 2011	Number of authorised officers, derived from publicly available council information (January 2014)
Barking ^b	Approximate number of barking dog complaints in 2011	Number of barking complaints from the <i>Domestic Animal Management Plan</i> of each council in a year
DogsAreaAll	Density of registered dogs by total land area	Calculated, DogsReg / Area
DogsAreaPark	Density of registered dogs by public parks and recreation zones	Calculated, DogsReg / AreaParks
DogsAreaPkCv	Density of registered dogs by public parks and recreation zones, and conservation reserves	Calculated, DogsReg / AreaPkCv
DogsBackyard	Density of registered dogs by dwellings likely to have a backyard	Calculated, DogsReg / HouseTownhouse
DogsChildren	Density of registered dogs by persons aged under 18 years old	Calculated, DogsReg / U18
DogsHousehold	Density of registered dogs by number of dwellings	Calculated, DogsReg / Households
DogsHumans	Density of registered dogs by number of persons	Calculated, DogsReg / Population
DogsReg ^b	Number of registered dogs in 2011	Number of registered dogs from the <i>Domestic Animal Management Plan</i> of each council
English Proficiency ^c	Proportion of people with an English proficiency of at least a 'well' standard	2011 Census, ENGLP, proportion, proficiency at least 'Well'
Fertility ^c	Proportion of young children to women of childbearing age as a measure of fertility of the community	Calculated, 2011 Census, AGE _P , SEX _P , per 1000 fertile women $[AGE_P \leq 5] / [15 \leq SEX_P \leq 49 \mid \text{Female}] \times 1000$
Households ^c	Number of households	2011 Census, STRD, count
HouseTownhouse ^c	Number of households which are likely to have a backyard	2011 Census, STRD, count, dwelling type is 'Separate house' or 'Semi-detached row or terrace house'
IER ^c	A complex measure reported in the Census describing the relative level of economic resources of a community	2011 Census, SEIFA Index of economic resources

Attribute	Description	Source and units
Impound ^c	Number of impoundments in 2011	Number of impoundments from the <i>Domestic Animal Management Plan</i> of each council in a year
Income ^c	Household income	Calculated, 2011 Census, HIND, count, weekly household income SumProduct ([HIND] / midpoint(income range; final range midpoint \$5,500))
IRSD ^c	A complex measure reported in the Census describing the relative level of socio-economic disadvantage of a community	2011 Census, SEIFA Index of relative socioeconomic disadvantage
Migration ^c	Proportion of people not born in Australia	2011 Census, YARRP, proportion, not 'Not Applicable'
NumDogParks ^d	Number of off-leash parks (which may be dog parks)	Number of off-leash parks, derived from publicly available council information (January 2014)
Owner ^c	Tenure by household	2011 Census, TENLLD, proportion, tenure type is 'Owned outright' or 'Owned with a mortgage'
Playgrounds ^e	Number of playgrounds	Number of playgrounds, derived from publicly available council information (January 2014)
PopDensity	Number of people by total land area	Calculated, Population / Area
Population ^c	Number of people	2011 Census, AGEP, count
U18 ^c	Number of people under age 18	2011 Census, AGEP, count
U18Adults	Proportion of children to adults	Calculated, U18 / [Population – U18]

a. Land Victoria (2013); b. see Appendix 5; c. ABS (2011b); d. see Appendix 6; e. see Appendix 7

Table 11: Quantitative and spatial environmental attributes representing 30 drivers of dog ownership and planning listed by source (source: author, derived from an analysis of DAMPs and Table 2 on page 87).

Once the raw data corresponding to these environmental attributes described in Table 11 was gathered and, where necessary, normalised, Pearson correlations and associated p-values were calculated for each combination of attributes pairwise; a complete list of correlations and associated p-values is found in Appendix 9 (note that this list also includes three animal management measures which are introduced in Chapter 8). A hierarchical (reductive) cluster analysis was undertaken using the Pearson correlation measure to facilitate a preliminary grouping of attributes into environmental clusters as shown in Table 12:

Environmental cluster	Attributes
Population measures	Population of humans, children and youth Population of dogs Number of backyards Number of dog attack incidents Area of public open space
Conflict measures	Number of dog parks Number of barking incidents Number of playgrounds
Area density measures	Density of humans to land area Density of dogs to land area Density of dogs to public open space
Dog density measures	Number of dogs relative to humans and their households
Family measures	Rate of dog ownership Measure of fertility Relative affluence
Income measures	Income Relative socioeconomic disadvantage English proficiency

Table 12: Preliminary environmental clusters emerging from the cluster analysis of environmental attributes in Table 11 based on Pearson correlations and p-values in Appendix 9 (source: author).

These environmental clusters provide a preliminary indication of important demographic and geographic themes which have some association with the management of dogs in the community. Together, they suggest a broad narrative which supports my qualitative study of DAMPs in Chapter 8 and the formulation of an appropriately representative sample of councils for my study in Chapter 9.

I now turn to some institutional aspects of dogs in local government in support of my forthcoming study of DAMPs in Chapter 8. The registration of dogs importantly facilitates the education and compliance of dog owners in the community. Understanding to what extent dogs are unregistered then provides a measure of the appetite for compliance with local regulations.

7.2 Registration of dogs in Melbourne

The number of registered dogs in Melbourne in 2011 is approximately 440,000 (calculated using information sourced from various DAMPs). This compares with the census population of approximately 4,000,000 people and 1,630,000 dwellings, equating to around 11 registered dogs per 100 people (derived from various sources listed in Table 11). The question remains of how many dogs there are in Melbourne or, likewise, how compliant Melburnian dog owners are with registration requirements.

The Australian Companion Animal Council (‘ACAC’) is a peak body of the Australian pet care industry that seeks to encourage responsible pet ownership which is both integrated with and considerate of the needs of broader society. Through this body, the Australian pet care industry has funded a series of longitudinal studies that, among other things, attempt to ascertain the population of dogs in Australia (ACAC 2010). The pet care industry shares this interest with councils that are also keenly interested in understanding the true population of dogs in their municipalities. Alongside other methodologies, these yardsticks are used by some councils to estimate the true population of dogs in their communities. Councils invest considerable effort in improving registration compliance in their communities for a number of reasons as shown in Table 13:

Registration and responsible dog ownership	• Registration leads to more responsible behaviours of dog owners (City of Melton 2012, p.10; City of Port Phillip 2012, p.16; City of Yarra 2013, pp.8,16-7; Frankston City Council 2012, p.15). • Education programs on responsible dog ownership lead to greater compliance with registration requirements (City of Casey 2013, p.18; Wyndham City Council 2013, p.9). • Registration also streamlines council communication with dog owners, with a number of councils targeting their responsible ownership activities toward registered dog owners (City of Glen Eira 2013, p.8; City of Yarra 2013, p.17); to this end, one predominantly rural shire seeks to increase its educational reach by using a variety of communication methods to encourage registration (Morrington Peninsula Shire Council 2013, p.16).
Registration and animal welfare	• Increasing compliance in registration improves the outcomes for dogs across the community (Bayside City Council 2012a, p.12; City of Yarra 2013, p.9; Morrington Peninsula Shire Council 2013, p.17). • Dogs are reunited more quickly with increased registration compliance (City of Darebin 2013, pp.16-7; City of Greater Dandenong 2013, pp.21-2). • Euthanasia rates are reduced with greater registration compliance (Banyule City Council 2012, p.28; City of Kingston 2012, p.35; Manningham City Council 2013, pp.48-9; Maribyrnong City Council 2013, p.16).
Registration and council resources	• Registration compliance reduces the cost of reuniting lost dogs (City of Melton 2012, p.10). • Registration assists council in appropriate resourcing of its animal management function (City of Whittlesea 2013, p.14). • Registration helps council better understand its pet demographic (Nillumbik Shire Council 2013, p.11).

Table 13: Benefits of complying with registration (source: author, derived from various DAMPs).

This summary demonstrates that a broad consensus exists amongst many Melbourne councils that registration benefits the council, the broader community, dog owners and dogs themselves. Registration allows councils to both manage and plan for dogs in their communities, improving the long-term availability of amenities and services for dogs and their owners and in turn affecting the opportunities afforded to dogs. Understanding the nature and extent of registration non-compliance is therefore important to improving the welfare of dogs in the community.

Estimating the number of dogs in Melbourne is not a straightforward task due to non-compliance with registration requirements in the community. A survey of 30 DAMPs from metropolitan Melbourne⁴ revealed a number of different measures used to estimate the population of dogs. These measures are described in Table 14 alongside their yardstick and inherent assumptions:

Measure	Yardstick	Assumptions
BIS Shrapnel	Households	Kind of dwelling does not matter. Number of people in household does not matter. Population density does not matter. More households imply more dogs.
	Population	Kind of dwelling does not matter. More people imply more dogs.
Census/Audit	Sample proportion	Sample can be generalised.
Flat multiple	Registration compliance	Requires other experience to understand how compliant the community generally is in other ways.
	Impoundment compliance	This uses the experience of owners that allow their dogs to be 'at large' as a proxy for community compliance. This would need a causal filter to help understand the degree of irresponsibility in general of owners of impounded dogs.

Table 14: Common measures of dog population (source: author's DAMP analysis in Appendix 11).

Registration and compliance data was derived from the DAMPs along with any details of measurement methods which individual councils chose to adopt to inform my estimate of the true population of dogs in Melbourne. From the bespoke work

⁴ There are 31 councils in metropolitan Melbourne however I was not successful in obtaining a copy of the City of Moreland's DAMP. The City of Moreland is excluded from my study of DAMPs since it is not possible to reconstruct a DAMP from other publicly available information.

undertaken by a number of councils, it appears that the average number of dogs in metropolitan Melbourne is less than the ACAC estimate of 16 per 100 people (ACAC 2010, p.7). Taking into account this work, I estimate that the population of dogs in metropolitan Melbourne in 2011 lies between 500,000 and 640,000, or 12.6 to 16 dogs per 100 people (see Appendix 11 for details of raw data and my calculations with reasoning). Whilst these estimates on their own are crude and a metropolitan average measure of non-compliance, they nevertheless provide councils with a basic understanding of typical non-compliance which can, with some care, facilitate an appropriate supply of amenities and more effective provision of services in the long-term, commensurate with the approximate true number of dogs living in that community.

Some councils are starting to collect statistics of the proportion of impounded dogs which are unregistered. In the long run, such statistics may prove useful in estimating a population of dogs, however potentially irresponsible behaviour of dog owners that allow their dog to roam at large may have substantial correlation with a lack of responsibility in complying with registration requirements. The cause of the impoundment is therefore an essential component to enable the use this data to estimate the population of dogs. Further research in this space could help councils understand both the extent and shape of compliance across the community; it is however beyond the scope of my thesis to examine this subject in further detail.

7.3 Provision of public open space in Melbourne

The framework of justice for dogs introduced in Chapter 6 highlights the importance of public open space in planning for dogs, demonstrating that these spaces are the most crucial to ensure a dog can function to his or her greatest potential and capability. Councils vary by the amount of public open space provided for recreation, both in terms of the number and size of parks. For the purposes of planning for dogs in the community, both the number and size of parks is important to enable dogs to easily reach parks without the dog and owner needing to travel by car. This is particularly true for elderly residents, with Greater Dandenong specifically highlighting this as an important consideration (City of Greater Dandenong 2013, p.15). Furthermore, it is important to consider whether parks allow dogs to roam off-leash and whether they are

fenced (Bayside City Council 2012a, p.21; City of Whittlesea 2013, p.30; Nillumbik Shire Council 2013, p.20).

In considering the question of what is generally considered urban parkland or public open space, I refer to the *Victoria Planning Provisions* planning scheme zone definitions:

- **Public Park and Recreation Zone (PPRZ):** “To recognise areas for public recreation and open space. To protect and conserve areas of significance where appropriate.” (State Government of Victoria 2013, cl.36.02); and
- **Public Conservation and Resource Zone (PCRZ):** “To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values. To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes” (State Government of Victoria 2013, cl.36.03).

The objectives of PPRZ land and PCRZ land differ. PPRZ land is generally for the use of the community for formal or informal recreation uses where one of these permitted uses is typically (but not always) on-leash and/or off-leash dog-walking. The expectation of PCRZ land on the other hand is that it is primarily to support the natural environment or resource endeavours which can in certain cases be in direct conflict with on-leash and off-leash dog-walking. Thus, both are important measures of public open space however may have different accessibility for dog-walking activities and are therefore examined separately.

In arriving at an overall measure of public open space provision of a municipality, I have developed a crude indicator that equally ranks councils on three measures of proximity, size and dog amenity, mirroring the drivers of proximity, size and attractiveness identified in Giles-Corti et al. (2005):

- **Proximity measure:** the number of parks in the municipality per household (raw) and per household as a proportion of the municipality’s land area (normalised);
- **Size measure:** the area of parks in the municipality, both in raw terms and as a proportion of the land area of the municipality;

- **Dog amenity measure:** the number of off-leash parks in the municipality (these may or may not be dog parks) as a proportion of the number of registered dogs in that municipality⁵.

The proximity measure counts the number of parks in a municipality. This ought to provide a crude measure of proximity, with a notable exception where the parks are mostly co-located in short distance from one another and that location is far removed from housing. The size measure examines the land area of parks both as raw hectares and as a normalised proportion of the municipality's land area. Whilst this provides a crude measure of public open space, it does not recognise borrowed amenity from neighbouring municipalities (for 'borrowed amenity', see Chapter 12). An overlay of the number of off-leash parks in the municipality, which may or may not be dog parks, crudely accounts for the additional amenity provided by councils which offer a greater number of off-leash opportunities for dogs. In the absence of any definitive weighting to the three elements of proximity, size and attractiveness in Giles-Corti et al. (2005), I will weight each crude measure equally to arrive at an overall assessment of the relative park provision of a municipality.

As an initial measure of urban public open space, I define parks as zoned Public Park and Recreation (PPRZ), excluding land zoned as Public Conservation and Resource (PCRZ). The results of this measure are summarised in Table 15. According to this measure, the top ranked municipalities for providing unrestricted urban parkland for off-leash activity are Knox, Casey, Banyule and Manningham. Although it has fewer off-leash opportunities across its municipality, the small, inner city council of Port Phillip benefits from the presence of Albert Park, a Parks Victoria venue that offers substantial off-leash opportunities for dogs on its various sports fields (City of Port Phillip 2012, p.31). Bayside and Hume both have substantial recreation park opportunities however these are proportionately lower than Port Phillip when the size of the municipality is taken into consideration. Many open space opportunities in Bayside are not accessible to the public (e.g., private golf clubs (Bayside City Council 2012b, pp.19,54)). The

⁵ Technically, it would be more appropriate to use an estimate of the total number of dogs by council; however consistent estimates at that level of detail are not available. Section 7.2 details how a number of councils have estimated the true population of dogs. Further research in this area to improve both reliability and consistency of the measures of total dog population across councils would prove worthwhile.

impact of private open space is masked by my crude public open space provision measure.

The bottom ranked municipalities require further consideration. Mornington Peninsula, Yarra Ranges and Cardinia offer few parks for recreation, however they each have substantial tracts of land zoned for conservation (Land Victoria 2013). These parks typically have restricted access for dogs, either through mandatory on-leash requirements or prohibition, as they may damage sensitive environments. If conservation zones are considered, the top ranked municipalities remain unchanged; however, both Yarra Ranges and Cardinia improve in ranking, replaced by the suburban councils of Glen Eira and Greater Dandenong, both of which have little or no conservation zones; rankings including an allowance for conservation zones are found in Table 16.

A comparison of Table 15 and Table 16 indicates that Yarra Ranges and Cardinia have open space opportunities for their communities however these may be unsuitable for dogs; Mornington Peninsula appears to have limited opportunities for dogs, as do Wyndham and Melton. These crude measures allow me to delineate otherwise similar councils according to the range of different opportunities available for dogs to exercise and recreate in public open space.

This chapter has focused on establishing the context of planning for dogs in Melbourne by examining quantitative and spatial data, the population of dogs and the distribution of urban parkland throughout the metropolitan area. In Chapter 8, I turn to examine qualitative traces of how planning for dogs is practiced. I begin by thoroughly studying each metropolitan council's DAMP, finding that the performance of animal management situates on a spectrum of education-compliance-enforcement activity. Earlier in Part III, I asserted the importance for my study in understanding both the current urban environment and how that urban environment is planned to situate planning for dogs in context and facilitate the later grounding of theory. Consequently in the second section of Chapter 8, I focus on the ontologies of planners to understand how planning urban environments for dogs is typically undertaken in practice. Following this in Chapter 9, I conclude with the development of a sampling framework and provide a theoretical outline to guide the structure of my thesis exposition in Part V.

Parks by land area per household		Parks by number per household	Off-leash parks by number per registered dog	Overall ranking	
Raw	Normalised			Raw	Normalised
TOP 5 (from 1 to 5) (most)					
Bayside	Bayside	Hume	Knox	Knox	Knox
Kingston	Port Phillip	Manningham	Casey	Manningham	Manningham
Nillumbik	City of Yarra	Casey	Banyule	Casey	Banyule
Yarra Ranges	City of Melbourne	Whittlesea	Manningham	Bayside, Hume	Port Phillip
Mornington Pen.	Maribyrnong	Knox	Moreland		Casey
BOTTOM 5 (from 27 to 31) (least)					
Gr. Dandenong	Hume	Cardinia	Yarra Ranges	Whittlesea	Mornington Pen.
Moreland	Wyndham	Glen Eira	Wyndham	Cardinia	Yarra Ranges
Stonnington	Cardinia	Mornington Pen.	Cardinia	Melton	Cardinia
Glen Eira	Yarra Ranges	Wyndham	Whittlesea	Wyndham	Wyndham
Whittlesea	Whittlesea	Melton	Melton	Glen Eira	Melton

Table 15: Provision of public open space for recreation (source: author, derived from Land Victoria (2013) (land zoned PPRZ), published council data (see Appendix 6) and DAMP data (see Appendix 5). Equally ranked councils are in alphabetical order in the same cell.)

Parks by land area including conservation zones per household		Parks by number per household	Off-leash parks by number per registered dog	Overall ranking including conservation zones	
Raw	Normalised			Raw	Normalised
TOP 5 (from 1 to 5) (most)					
Yarra Ranges	Yarra Ranges	Hume	Knox	Manningham	Manningham
Cardinia	Bayside	Manningham	Casey	Casey, Knox	Knox
Nillumbik	Nillumbik	Casey	Banyule		Banyule
Mornington Pen.	Cardinia	Whittlesea	Manningham	Hume	Casey,
Manningham	Port Phillip	Knox	Moreland	Banyule	Port Phillip
BOTTOM 5 (from 27 to 31) (least)					
Maribyrnong	Whittlesea	Cardinia	Yarra Ranges	Gr. Dandenong,	Mornington Pen.
Gr. Dandenong	Hume	Glen Eira	Wyndham	City of Yarra	Gr. Dandenong
Moreland	Gr. Dandenong	Mornington Pen.	Cardinia	Wyndham	Glen Eira
Stonnington	Wyndham	Wyndham	Whittlesea	Glen Eira	Wyndham
Glen Eira	Melton	Melton	Melton	Melton	Melton

Table 16: Provision of public open space for recreation and conservation (source: author, derived from Land Victoria (2013) (land zoned PPRZ and PCRZ), published council data (see Appendix 6) and DAMP data (see Appendix 5). Equally ranked councils are ordered alphabetically within the same cell.)

8. THE PRACTICES AND ONTOLOGIES OF PLANNING FOR DOGS

To introduce the practice of planning for dogs in councils, I examine the nature of council activity in management of dogs in the community. In section 8.1, I classify the animal management activities of councils through a narrowly focused content analysis of each metropolitan council's *Domestic Animal Management Plan* ('DAMP'). This section provides a means to delineate councils from one another by how animal management is performed from the perspective of an ongoing process, thereby augmenting the environmental context of each council established in the quantitative and spatial analysis of Chapter 7. Viewing the outcomes of animal management through a performative lens provides an interesting perspective to examine how councils manage dogs and, potentially, plan for dogs in their communities, this in turn providing fruitful avenues for further contrast and inquiry in subsequent chapters.

Planning for dogs is a multidisciplinary pursuit, incorporating animal management, open space planning and urban planning disciplines to reach an outcome which appeals to both council and the community. In practice, these disciplines may not often cross paths in other contexts and may encounter difficulties working together; in some cases, the disciplines appear largely incompatible with one another. Consequently, section 8.2 begins with a systematic comparison of the various approaches councils use to do their planning and make decisions in order to understand both the extent of difference and the difficulties experienced with animal management, open space planning and urban planning working together. A spectrum of approaches from process- to outcomes-focus is introduced as analogous to the planner's ontology, providing a critical lens through which to examine the different approaches of council at a fundamental level and provide an explanation as to why they differ in practice.

8.1 Practising animal management at councils

Section 68A of the *Domestic Animals Act 1994* (Vic.) ('DAA') requires that each council produces a DAMP for submission to the Department of Environment and Primary Industries ('DEPI') every four years, this document focusing primarily on the management of domesticated dogs and cats in the community. This section explores the content of these plans within a narrow frame of approach to the management of dogs in the community. The plans have a standard structure of subject matter however

approaches of individual councils to domestic animal management can differ. In some cases, the plans provide a glimpse into the council's ideology of how they believe animals ought to integrate into the human community.

This section begins by describing the common conflict between dogs and humans found in off-leash parks across Melbourne. This issue is common to many councils, irrespective of whether the council currently provides many or few opportunities for dogs to exercise off-leash and is passionately discussed and debated within many independent consultation processes. My analysis of the DAMPs suggests that councils primarily act with a particular mix of education, compliance and enforcement when managing domestic animals in their communities; of particular note, this conclusion is supported by the range of approaches to planning off-leash parks amongst different councils. The section concludes with a focus on enforcement activities of councils and their relative predominance in communities that have many off-leash parks. Notably, a statistical analysis of nuisance complaints suggests that despite the polarising nature of off-leash park planning in the community as a whole, councils can gradually increase their allocation of off-leash parks in the community without any substantially detrimental impact to the perception of dogs in the community at large.

Theoretical balance in animal management

Most DAMPs refer to balance between the needs of pet owners and the broader community, generally referring to 'achieving a balance' or 'harmonious living' as a community. This theme often translates into commentary on predominant community conflict, particularly in reference to the conduct of dogs and their owners and the behaviour of owners in minimising community nuisance in public places, including the removal of dog litter.

As with society in general, dog owners do not always conform to established community norms. This creates particular problems in planning for dogs, where it becomes difficult to justify changes in favour of dogs where such deviance prevails in a segment of the community. Bayside highlights the difficulty faced by council in increasing dog amenity in its municipality due to the behaviour of irresponsible dog owners that "flagrantly ignore dog on-leash regulations" (Bayside City Council 2012a, p.14) and, together with the City of Yarra, finds that dog litter problems are exacerbated in off-leash areas (Bayside City Council 2012a, p.13; City of Yarra 2013, p.21).

Kingston has found through consultations that increasing the number of off-leash dog parks ‘polarises’ the community (City of Kingston 2012, p.17); similarly, Bayside has found that an increase in provision of off-leash parks increases expectations from the broader community that dog owners ought to demonstrate greater responsibility (Bayside City Council 2012a, p.20), fuelling rather than abating conflict. In contrast, there is some agreement between a number of councils that providing more off-leash space for dogs would reduce incidents of nuisance as exercised dogs are less bored (City of Greater Dandenong 2013, p.15; Mornington Peninsula Shire Council 2013, p.4; Yarra Ranges Council 2013, p.13). The Urbanik and Morgan (2013) case study from Missouri, USA sides with Kingston, demonstrating in their context that the community polarisation of planning for new dog parks appears to consume any other ancillary benefits which might flow from greater exercise opportunities. In order to reduce this conflict, Lee, Shepley and Huang (2009) suggest that information and education campaigns targeting responsible use of dog parks by dog owners would prove beneficial, highlighting the importance of education as contributing to the effectiveness of compliance activity in practice.

Off-leash areas incorporate many active interests, including those of dogs, dog owners, people on foot and bicycle, neighbours, and the natural environment. In managing these conflicts, councils refer to balancing or harmonising interests of all park users. There seems to be an implicit assumption by some councils that the priority use rests with dog owners by default and that one purpose of the DAMP is to rebalance this priority towards the whole of community, for example:

“A careful balance must be achieved for all park users not only pet owners.” – City of Glen Eira (2013, p.12)

“Off leash reserves are not designated for the sole use of owners and their dogs, they are shared use areas.” – Hobsons Bay City Council (2013, p.28)

“Off leash areas are shared space and it is important that dog owners are respectful of other people using that space.” – Knox City Council (2013, p.39)

“The City of Melbourne understands the importance of having public parks where dogs can be exercised off leash as well as the importance of balancing the needs of dog owners with non-dog owners and visitors to the City of Melbourne.” – City of Melbourne (2013, p.18)

“Council understands the importance of having off-leash parks where dogs can be exercised. However, it is important to balance the needs of dog owners and non-dog owners and visitors to the City of Whittlesea.” – City of Whittlesea (2013, p.30)

Whereas all these excerpts speak of dogs and the community in a similar way, the account of Knox is particularly expressive by describing an obligation of dog owners to ‘respect’ other people in the community when using off-leash parks. Since dog owners are a part of the community, then they too deserve respect in their use of the off-leash park, so long as that use is responsible and orderly. This poses a caveat that *if* dog owners are responsible, *then* they have certain rights in the community that irresponsible dog owners do not. Furthermore, *if* the community is to assume dog owners are responsible as a default position, *then* they must be entitled to respect by default and thereby reduce conflict through a position of mutual understanding and respect. Turning the argument around, *if* such conflict is manifest in off-leash parks, *then* such mutual understanding and respect does not exist by-and-large and, consequently, the broader community does not assume dog owners are responsible as a default position. This argument justifies the focus of councils on a mixture of educational, compliance and enforcement activities to address this community division.

Introducing a spectrum of animal management activities

The DAA requires that each council produces a DAMP that documents the current state of animal management in its municipality and what plans it has for animal management over the coming four years. The standardised remit for the DAMP provides substantial scope for comparison of content between councils since each council is responding to the same requirement. The range of standardised content covered by each DAMP (as prescribed by section 68A of the DAA) includes:

- Municipal context, including demographics and other considerations;
- Conduct and training of Animal Management Officers (AMOs);
- Responsible dog ownership promotion;
- Compliance with standard provisions of the legislation, including registration and identification and domestic animal businesses;
- Programs to minimise harmful effects to amenity of nuisance;
- Programs to minimise the incidence of dog attack;
- Programs to manage and regulate dangerous, menacing and restricted breed dogs;

- Assessing and addressing issues of overpopulation and high euthanasia;
- Reviews of existing orders made under the DAA;
- Assessing the adequacy of the current animal management function and planning activities for the next four years (the term of the DAMP); and
- Any other matters pertinent to each council.

Compliance is central to the DAMP, largely borne from its statutory genesis. According to the *Concise Oxford Dictionary* (1995), ‘compliance’ is “the act or instance of complying; obedience to a request, command, etc.” By definition, compliance is exact and absolute and has a basis of fact. A regulation or rule usually exists overtly in writing, such as a statute, ordinance or local law. Regulation is however, in a literal sense, a regulator of society and therefore exists in community norms, expectations and values; these might include the values of quiet enjoyment, peace, safety and security. In relation to domestic animal management, this norm often arises in the context of controlling nuisances or excess numbers of animals in the community. For instance, Casey promotes the need for quality of life:

“Residents need to be encouraged to responsibly manage their dogs and cats to enhance neighbourhood amenity.” – City of Casey (2013, p.33)

This excerpt begs a number of questions, such as what responsible management of dogs comprises and how an enhancement to neighbourhood amenity is ascertained. That is, dog owners need to conform to the community’s expectations of reasonable, if not enhanced, neighbourhood amenity from the presence of dogs in the community.

There are many requirements of council and government more generally on the conduct of dog owners. Dogs themselves can never be regarded as compliant or non-compliant in the context of laws and regulations; any regulation imposed on dogs is foreign to them as a species (see Chapter 2). A focus on compliance is therefore a focus on the acts and instances of compliance of dog owners to various regulations that encompass dog ownership in the context of the community. It is a focus on the ‘what’ and is contextually controlled. For example, Hobsons Bay states that:

“Off leash reserves are not designated for the sole use of owners and their dogs, they are shared use areas. Although in an off leash area, dog owners are required to have their dogs under effective control.” – Hobsons Bay City Council (2013, p.28)

This excerpt presents the requirement in the context of off-leash reserves as belonging to the community as a whole, not just the community of dog owners and their dogs. It is both clear and concise, however it does not explain why this is an effective measure to ensure the community's mutual enjoyment of the reserve. Common sense prevails that owners which fail to keep effective control of their dogs put the broader community in jeopardy from uncontrolled anti-social behaviour of dogs or simple unwanted attention of the dog towards another park user, be they human or animal. However, Hobsons Bay in making this statement does not provide the reasons why this is an effective measure, nor does it specify exactly what it is going to do about transgressions.

Educational approaches focus on both describing the regulation or control and explaining what that regulation ought to do. Unlike compliance approaches that focus almost exclusively on the 'what', educational approaches focus on the 'what', the 'why' and the 'how'. For example, Brimbank and Maribyrnong respectively describe their activities in relation to contextualising regulation:

"Production of awareness and educative materials aimed at dog owners' responsibilities, and advising the community of the best way to react to dogs in public" – Brimbank City Council (2013, p.19)

"Where appropriate, educational discussions pertaining to collection of litter and off leash issues" – Maribyrnong City Council (2013, p.10)

Whilst the reader does not know the content of these materials or discussions referred to in these excerpts, the reader does know that the materials and discussions are educational and will involve to some extent the subject of off-leash issues. Through written or verbal materials, the animal management officer would arguably explain the regulations pertaining to off-leash behaviours in the context of place and, in doing so, explain why those regulations are in effect (e.g., whole of community enjoyment, dogs on-leash need freedom of use without undesirable bother or attention from dogs off-leash, etc.).

Enforcement approaches focus on the consequences of actions or inactions, of what happens to the dog owner or the dog on transgression of regulations. As with all transgressions, there is a scale of seriousness of enforcement action, ranging from verbal or written warnings, to issuing infringements, notices to comply or penalties, to prosecution at tribunals or in court, and, in extreme cases, incarceration of the owner or destruction of the dog. These activities are described by councils within their DAMPs

in some detail and, in some cases, communicated with particular owners or the community as a whole to raise awareness of the serious nature of some transgressions (e.g., advertising statistics or results of prosecutions relating to dog attacks, dangerous dogs-at-large or unlicensed domestic animal business operations). In this way, enforcement and educational activities can overlap. Some councils further empower the term ‘enforcement’ by adjectives such as ‘rigid’ (City of Casey 2013, p.36) or ‘strict’ (City of Greater Dandenong 2013, pp.16,26; Wyndham City Council 2013, p.17), giving the reader an impression that somehow there is ‘normal’ enforcement and ‘stronger’ enforcement and in turn highlighting that enforcement of regulations in practice has some allowance for discretion.

Statements by councils need not exclusively fall into the education, compliance or enforcement categories. In fact, many statements combine them seamlessly. For example, Monash uses its registration renewal activity to provide advice to residents on regulations and laws:

“Include information regarding confinement, barking, dogs at large etc. in registration information packs each year” – City of Monash (2013, p.22)

Similar to Monash, the City of Yarra refers to a need for education to help manage non-compliance with noise nuisance regulations:

“Noise nuisance complaints continue to be a major issue, often as a result of increased animal ownership in high density areas. Living in apartments or small properties with dogs is challenging and a priority will be to educate dog owners about proper pet selection, training and responsible animal ownership.” – City of Yarra (2013, p.21)

This excerpt of the City of Yarra is particularly insightful as it shows an educational approach to compliance that is also sensitive to context. Councils typically refer to density or particular cultural norms in drawing such context out, for example:

“Over 50% of residents in Brimbank were born overseas and there is a significant cultural and linguistic diversity in the community. This creates a variety of communication and engagement barriers with Council’s animal management services and a broader understanding of responsible pet ownership, which includes the necessity to [register] dogs and cats.” – Brimbank City Council (2013, p.9)

In this excerpt, Brimbank combines education and compliance in a culturally sensitive context. Educational approaches to enforcement both raise awareness of a particular transgression and in doing so act as a deterrent, for example:

“Publication of Court outcomes is critical to keep the public informed and used as a deterrent” – Cardinia Shire Council (2012, p.21)

“Publication of successful prosecutions to act as a deterrent for others” – City of Glen Eira (2013, p.30)

“Improve public awareness of what a dog attack is and how to report using media articles, public notices in parks etc., A-frame billboards, website updates, direct mail, etc.” – City of Melton (2012, p.19)

“Improve public awareness of what constitutes a dog attack and how to report attacks using media articles, website updates, direct mail, etc.” – City of Whittlesea (2013, p.19)

“Increase awareness of the possible penalties and possible actions that may result in the event of an attack” – Wyndham City Council (2013, p.18)

These excerpts illustrate a typical blurring of the boundaries between educational, compliance and enforcement activities. Brimbank and the City of Yarra however go further, describing the spectrum as an ordinal scale from education to enforcement (emphasis added):

“Community discussion and comment at these sessions reinforced the idea for increased education and awareness about responsible pet ownership, as a *complementary action* in relation to Council's ongoing enforcement program” – Brimbank City Council (2013, p.34)

“Council generally endorses a strategy of increasing awareness and understanding of the issues, developing responsible pet ownership *before* issuing penalties” – City of Yarra (2013, p.2)

This preceding discussion supports my approach to examine education, compliance and enforcement as a spectrum of possible animal management approaches. In the next subsection, I catalogue my analysis of the DAMPs of 30 metropolitan councils in the context of an education-compliance-enforcement spectrum to compare and contrast the approaches of councils to their domestic animal management. These results, together with the earlier quantitative and spatial analyses (see Chapter 7), provide a sound basis for creating my sample of councils for detailed study in the next chapter.

Understanding animal management in Melbourne through an education-compliance-enforcement spectrum

This subsection catalogues the DAMPs from 30 metropolitan councils within Melbourne⁶ along an education-compliance-enforcement spectrum. The consistency of structure in the DAMP provides a sound basis to compare and contrast the approaches of councils to animal management, adding to the rich source of quantitative and spatial data derived from this and other sources. Together, this information contributes to developing a truly representative sample of councils for detailed study.

Each DAMP was broken into a series of individual textual segments for qualitative content analysis using the procedure described earlier in Table 5 (page 95). A majority of text from each DAMP was deemed relevant to include in my study, with exclusions generally corresponding to both generic text regarding standard DAA requirements and specific text which related solely to other species, most notably cats. The included textual data from the DAMPs corresponded to over 160,000 words, the etic-emic coding process focusing specifically on the array of animal management activities in councils given the particular nature of this documentary data. The codes were classified into ‘object’ and ‘action’, with the object being the focus of commentary and the action defining how a council would act in relation to the particular circumstance of that object. Together this commentary on objects and actions comprises the subject matter of the DAMP.

Actions are focused on the active *doing* of animal management by council and comprise:

- educational activity;
- compliance activity;
- enforcement activity; and
- consultative activity.

Educational, compliance and enforcement activities represent the actions which councils take in general to manage animals and are comparable between different councils since each council is essentially charged with the same remit under the DAA. Consultative activity is a different kind of active animal management, being localised in nature and

⁶ My study of DAMPs excludes the City of Moreland; see footnote 4 on page 123.

reflective of a particular community's stance on an issue, contextualised by time and place (e.g., whether off-leash activity should be allowed on a particular local beach as in City of Port Phillip (2009b)). Consultations form part of a community's narrative and are inherently non-comparable with external contexts. The remainder of this subsection thus focuses on comparing educational, compliance and enforcement approaches to animal management across councils. Passive activities such as informing, planning and visioning are considered objects of study, in the sense of noun rather than verb, these often consisting of active sub-elements of an educational, compliance, consultative or enforcement nature.

The DAMPs consist of other non-textual features, most notably images, colours and formatting. This imagery varied in both quantity and quality across the DAMPs; however, neither the existence of images nor the quantity or quality of those images influenced the animal management function of councils as measured by the educational, compliance and enforcement content of the DAMPs. Imagery, formatting and use of colour likely affect the accessibility of documents to residents, e.g. comparing the attractiveness of a formal committee paper to a colourful booklet with ostensibly the same thematic and textual content. In this sense, if the intention of the DAMP is to be accessible to the community (as is the intention outlined by DEPI (2014)), then those which have imagery, colours and formatting do support this intention despite having no substantial effect on the nature of the planned educational, compliance or enforcement activities themselves.

In implementing an education-compliance-enforcement spectrum, I assign each council three scores that correspond to the weighted average proportion of DAMP text which focuses on educational, compliance or enforcement activity (text which is not action-oriented is excluded from this analysis). Figure 2 summarises the results of this process, visualising the approach each council takes to manage dogs in the community relative to other councils. This figure identifies those councils which are particular outliers in their documented approach to animal management, facilitating the identification of councils which may be interesting to include as part of my comparative case study. It is notable that all councils undertake educational, compliance and enforcement activities in the course of their work; there is however a tendency for some councils to prefer one kind of activity above others.

In Figure 3, I spatially represent education and enforcement approaches as positioned on a spectrum reflecting the ordinal scale alluded to in earlier commentary, with the councils towards the middle of the spectrum neither strongly educational- nor strongly enforcement-oriented. This map provides an indication of where educational and enforcement approaches are prevalent, hinting of relationships between educational approaches and affluence, and between enforcement and public open space allocated to dogs. To supplement the education-enforcement spectrum depicted in Figure 3, I provide a spatial measure of compliance focus of each council in Figure 4. This map suggests that compliance approaches (be they educational or enforcement driven) are more prevalent in larger councils found on the urban fringe. Together, the maps provide preliminary guidance which links animal management approaches to spatial attributes of councils and provides a starting point for my subsequent, detailed analysis of qualitative attributes which may affect planning for dogs.

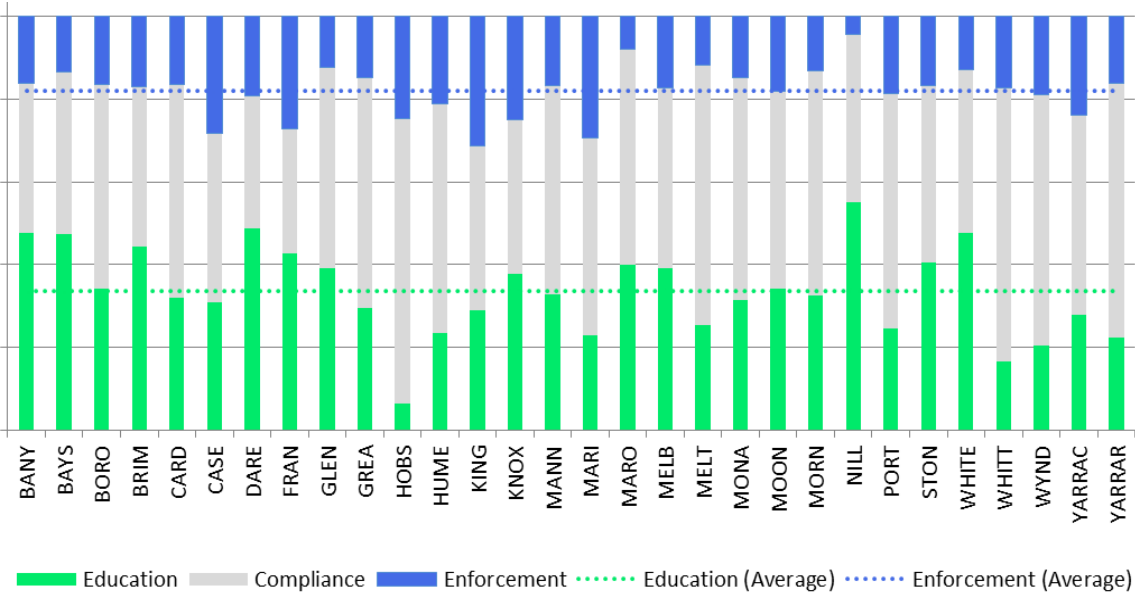


Figure 2: Weighted proportion of action-oriented text in each DAMP corresponding to education, compliance and enforcement. Average education-compliance-enforcement divisions across the 30 councils are indicated by two horizontal lines (source: author, derived from individual council DAMPs; see Appendix 5 to decode council labels; as published in Carter (2016a)).

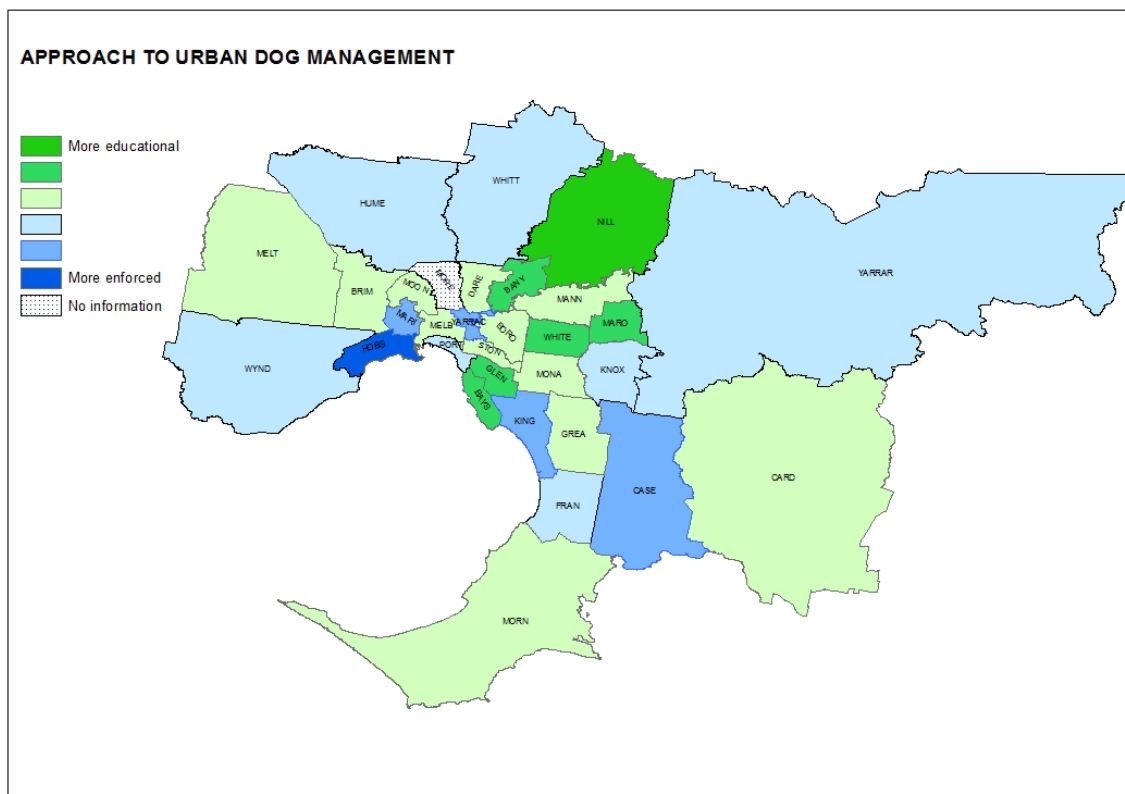


Figure 3: The approach to urban dog management along an educational to enforcement spectrum (source: author, using ABS (2011a) cartographic boundary files and data in Figure 2).

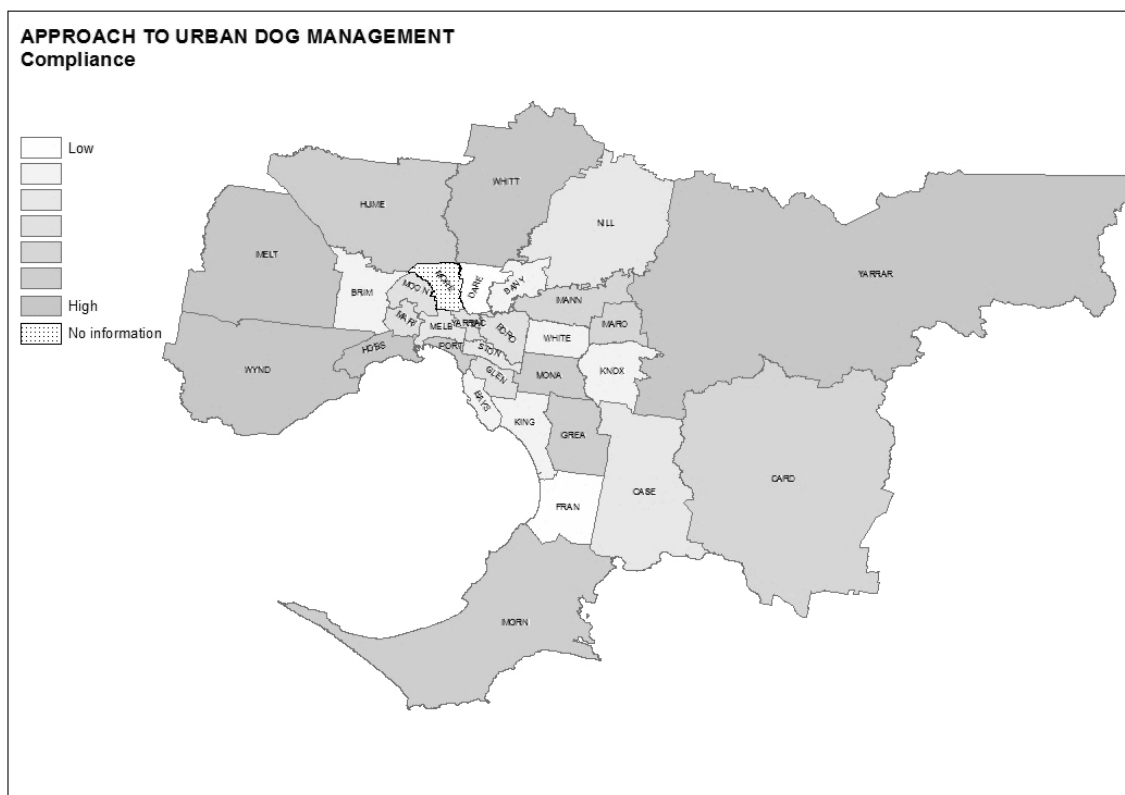


Figure 4: The extent of compliance activity in the approach of councils to managing dogs (source: author, using ABS (2011a) cartographic boundary files and data in Figure 2).

Statistics drawn from Appendix 9 and Appendix 10 provide preliminary insight into possible associations between various animal management approaches and the underlying environmental context of each council. The provision of more animal management officers increases the proportion of (arguably more resource-intensive) community engagement activity through either education or enforcement approaches. Perhaps borne from necessity, animal management officers are more prevalent in communities with more young children and where more dogs are registered. In accord with this, the strong negative correlation of animal management resourcing with compliance activities more broadly suggests that the overall animal management workload and the number of animal management officers increase in tandem; this begs the question of whether the work of animal management officers is largely self-generative. Compliance activity more generally is greater along the urban fringe than in metropolitan areas, this focus on essential compliance communications perhaps resulting from the thinly spread workforce over a larger and less densely populated land area. Conversely, the general level of affluence in the community appears to affect the provision of educational animal management services, with councils in more affluent communities having a greater emphasis on educational animal management. These brief insights demonstrate the importance of including a range of urban environments encapsulating a variety of animal management approaches in order to develop a representative sample of councils.

Practical balance in animal management

I return to the issue of off-leash parks and review the focus on enforcement actions in the context of balance in animal management. My earlier argument contended that if off-leash parks are the site of community tension and conflict, then the broader community does not assume dog owners are generally responsible in keeping their dogs under effective control and away from incompatible places such as organised sporting games and children's playgrounds. A number of councils find off-leash areas causing conflict and frustration (Bayside City Council 2012a, p.21; City of Monash 2013, p.36; Nillumbik Shire Council 2013, p.19), with Kingston concluding that the general issue of off-leash parks polarises the community (City of Kingston 2012, p.17).

Bayside highlights the relationship between off-leash parks and community expectations:

“The community expects a higher level of monitoring of dog off-leash parks to optimise compliance relating to dog litter and effective control of their pets. Additional dog off-leash parks and the introduction of timed access will significantly increase expectations across the municipality” – Bayside City Council (2012a, p.20)

In contrast to Bayside, the planned actions of both Boroondara and Hobsons Bay frame the conflict in terms of risk:

“...investigate and make recommendations that respond to the risks that arise out of dogs being exercised off-leash on and around shared paths and other recreational facilities” – City of Boroondara (2013, p.14)

“The Review [into the management of dogs in public places] has concluded that there is some risk to safety at various reserves and that action may be required. Off leash reserves are not designated for the sole use of owners and their dogs, they are shared use areas. Although in an off leash area, dog owners are required to have their dogs under effective control. Bike riders should travel at safe speeds for the area and conditions.” – Hobsons Bay City Council (2013, p.28)

More generally however, councils portray the relationship between pet owners and the broader community as one of balance. Typically, Glen Eira summarises the obligation of pet owners as one of responsible pet ownership:

“Responsible pet ownership is the key to a healthy relationship between dogs and the wider community in which they live.” – City of Glen Eira (2013, p.16)

I infer from these excerpts that the greater the number of off-leash parks, the greater the community’s expectation of enforcement activity within those parks and their environs to minimise that conflict. This inference is supported by my data showing a greater focus on enforcement in councils with more off-leash parks (see Appendix 9, depicted in Figure 5).

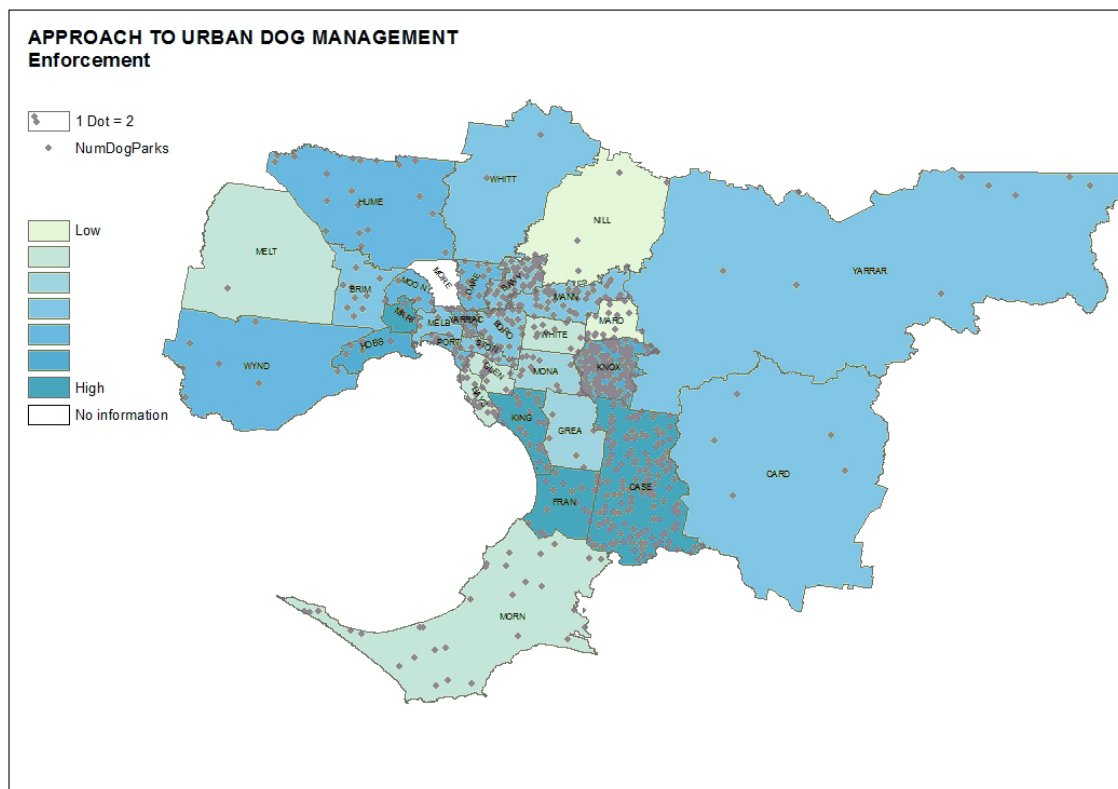


Figure 5: A map showing the extent of enforcement activity in the approach of councils to managing dogs along with the concentration of off-leash parks (off-leash park location within council is inexact) (source: author, using ABS (2011a) cartographic boundary files, off-leash park statistics in Appendix 6 and data in Figure 2).

This analysis of the relationship between off-leash parks and the enforcement activity of councils derives from a lack of consensus between councils concerning the impact which dog park provision has on the incidence of nuisance complaints, in particular complaints of excessive barking (sourced from my interpretation of DAMPs). The DAMPs include an outline of how each council treats nuisance behaviours of domestic animals and reveal excessive dog barking to be one of the most, if not the most commonly cited complaint across most councils throughout Melbourne (see also Chapter 2). Barking is a natural function of dogs and some breeds have a predisposition to bark more frequently than others. What is defined as ‘excessive barking’ is a value judgement, with some people having a heightened sensitivity to dog barking; in this way, the City of Melbourne states that “all dogs bark; it is whether their barking is excessive that it is unreasonable” (City of Melbourne 2013, p.17), with Monash and the City of Yarra recognising this ambiguity explicitly as part of their educational and compliance programs (City of Monash 2013, p.14; City of Yarra 2013, p.21).

The definition of excessive barking thus distils to a question of community norms, these shades of grey making the enforcement of local laws challenging in relation to nuisance barking. Unsurprisingly, the complaints of nuisance barking fielded by councils are generally resolved without issuance of infringements, with the role of councils as educator and mediator rather than enforcer. The reasons given by councils for this approach include being focused on neighbourliness and community and that many owners are unaware of the nuisance if the barking takes place in their absence as often happens. Further, some councils consider that their role includes educating the complainants of what excessive barking ought to mean, helping those aggrieved in the community to adjust their tolerance for barking to a preconceived norm given the place of dogs as part of the community. Nevertheless, simply because a law is challenging to enforce does not make the nuisance vanish; indeed, it is arguable that in the face of what an individual considers to be a nuisance, having a council appear to do little may lead to deeper division and resentment in the community, even if the council is taking a defensible approach. The knowledge that an individual's sensitivity to a nuisance exceeds the generally accepted levels in the community is of little consequence to alleviate their suffering; this coincides with accounts from animal management officers that regulate and enforce barking laws (see Chapter 10).

The incidence of dog barking complaints increases significantly in councils with more off-leash parks (see Appendix 9). Knox and Casey, adjoining councils in Melbourne's outer south-east, have the greatest number of dog parks by virtue that all parks, sports fields and other reserves within their municipalities are open for off-leash use unless signed otherwise (unlike other metropolitan councils which have a mirror policy; see Chapter 11 for further discussion of the implications of these policies); by virtue of their sheer number of parks they consequently have a substantial influence on this correlation. The temporary removal of Knox and Casey from the dataset returns the correlation between barking complaints and the number of dog parks to insignificance.

This result leads me to conclude that there is little detriment posed to the community in respect of dog barking nuisance by gradually increasing the number of dog park facilities, in that community complaints appear to only increase with a substantial increase in dog park facilities, such as an entire council releasing its parks for off-leash use *en masse*. This result accords with the views of Greater Dandenong, Mornington Peninsula and Yarra Ranges, each believing a greater number of off-leash parks in their

municipalities would reduce nuisance complaints since dogs would be arguably less bored having had a greater opportunity for play and exercise (City of Greater Dandenong 2013, p.15; Mornington Peninsula Shire Council 2013, p.4; Yarra Ranges Council 2013, p.13).

In contrast, a localised link between dog parks and barking complaints is found in a case study of dog parks in Missouri, USA. This study indicates grievance within the adjacent community arises from the additional noise, mess and smells from dogs using the park, thereby detracting from the parks other uses, particularly as a place of play for young children (Urbanik & Morgan 2013). It seems that dog parks are a divisive construct in many cities, Melbourne being no exception, with the communities agitating against both new and existing dog parks venting their frustrations in a variety of ways that relate both to dog parks and dogs more generally, including making complaints about their neighbours' dogs being a nuisance at home. Nevertheless, the results from my analysis of Melbourne's DAMPs and other data appear to augur well for piecemeal increases in off-leash park numbers as being acceptable to the broader community (see Chapter 12 for further discussion on open space planning for dogs).

The practice of animal management in council

Chapter 7 explored councils as population centres, as geographic entities and as institutions through the phenomena of responsible dog ownership, animal registration and public open space provision. This section has examined the role of councils in animal management and drivers of council actions in planning for and managing dogs. These lines of inquiry are wholly consistent with the results of operationalising justice for dogs (see Chapter 6). The choices that councils make in determining their approach to managing domestic animals in their communities are not isolated decisions; rather they are a direct reflection of the expectations and values within their communities. Alongside quantitative measures derived from the DAMP, the Australian Census and Land Victoria information, selecting communities that have different ideologies of how dogs ought to feature in urban environments adds to a rich diversity of councils in my representative sample. This analysis of animal management approaches provides a lens through which to capture such diversity.

8.2 Different approaches and the ontologies of council

Following on from the analysis of *Domestic Animal Management Plans* in the preceding section, I begin by unpacking the ways councils make planning decisions more broadly in practice. Once the planner decides that something needs to be done, then there are two decisions that take place: on the one hand, what process or system does the planner follow and, on the other, what outcome or objective does the planner wish to achieve. This process and outcomes framework represents a simplified form of ‘levers’ and ‘effects’ described by Faludi (1973, p.5) and is congruent with my earlier operationalisation of justice for dogs in Chapter 6. Such a dualism is not mutually exclusive; indeed many processes undertaken by planners involve considering both a process and an outcome. An emphasis emerges however, overt or subtle, that demonstrates an innate bias of the planner towards one or the other. This bias on its own is not too problematic; it does however cause particular difficulties when planners of different persuasions need to collaborate. In the case of animal management planning, the cross-over of disciplines creates a particularly complex planning environment.

Ontology and methodology are inseparable in comparative research (Hall 2003). This principle applies to how councils are driving process and outcomes at a local level which affect the dog’s urban environment in many ways. In Part III, I introduced a program of interviews across three disciplines of relevance to planning for dogs, being animal management, open space planning and urban planning. This section explores the ontologies and functionings of each discipline through the voices of these planners, finding that natural tensions which arise between disciplines can be difficult to address in practice.

Animal management in practice

There are a number of approaches which councils draw on to undertake animal management in practice. Councils which have animal management services that are more oriented towards carrying out enforcement activities tend to have a process-based approach to animal management as indicated by the following interviewees:

“Due to our very limited resources, we generally action our issues on complaint-basis only. We have very limited proactive responses.” – AMO 2

“I think we spend most of our time working in the system, barely coping with barking dogs, dog attacks, just trying to cope with the massive amount. We’ve done a lot of work in the two years we’ve been here to actually give the officers’ capacity... That’s working on the system, and we don’t do much of that at all, I’d be honest and say it.” – AMO 21

“Whatever the outcome is, but the outcome would suit the issue and the process... is the way forward to the outcome.” – AMO 5

“...because part of the education is informing them of the rules and regulations of the dog, then liaising, then you assess, then you enforce.” – AMO 3

“We have an Ask-Tell-Enforcement policy... [Strategy name] in any enforcement policy is the fact that... it’s what’s best for a majority of the community not for any individual. So when I approach you, I have a process in place and I stick to that process, because [Strategy name] would be about a fair and uniform approach for every member, so I don’t treat anyone any differently.” – AMO 8

These accounts reveal themes arising from this approach including constrained resources, consistency and enforcement as part of an escalation scale. Enforcement activities are entirely reactive and driven by reported or observed incidents that allegedly violate either the *Domestic Animals Act 1994* (Vic.) (‘DAA’) or the council’s own local laws. Enforcement activities represent (arguably) the most required set of activities under the DAA and understandably councils commit to resourcing those activities, particularly in response to more severe incidents such as dog attacks. Enforcement activities are inherently reactive and process-based. Where overall resources are constrained however, proactive educational activities tend to get cut back.

Interestingly, councils which have animal management services that are more oriented towards carrying out educational activities tend to have a more outcomes-based approach to animal management. Two illustrations of this alternative focus are:

“In regards to enforcement, it’s a very fine line in regards to ‘we’re damned if we do, we’re damned if we don’t’... It depends on what the offence is, but we have a process in place that governs how we enforce, but we do like to be fair and reasonable... You can put pie in the sky sort of stuff as the process starts to go and all of a sudden you’re giving the residents of the community an unrealistic expectation that you can’t meet.” – AMO 7

“[Situations can] become quite political and I would have to think carefully what the politics of the situation were in making that decision. Even if we had a manual, I couldn’t just go to the manual. So it’s very much outcomes/politics rather than procedures and policies.” – AMO 9

The contrast between the two kinds of approach is stark. In a process model, there appears a focus on the bare essentials (i.e., enforcement) whereas in the outcomes model there is a weight given towards realism and practicality of outcomes, with process being of secondary consideration.

Urban planning in practice

In terms of strategic urban planning, there are legislative requirements to undertake a stipulated process when changing the planning scheme through the *Planning and Environment Act 1987* (Vic.) ('PEA'). These requirements in turn drive the focus on process found at the heart of the kind of strategic urban planning that affects the planning scheme. Not all strategic urban planning affects change to the planning scheme however and in these cases, a focus on outcomes seems more feasible if not apparent; nevertheless, the following accounts suggest that there remains a tradition for urban planners to stick largely to process:

"Through the application process..., be consistent with the planning scheme, consistent with the local policies, and then have the outcome through the conditions... I think good planning is what they [the community] want to see and the outcome they want to be achieved." – UP 25

"Not to the point where the mediated outcome is a bad planning outcome but sometimes in order to get a project through, there might need to be concessions made... in order to reduce the opposition to that project... I think that the strategic work we do, there's a lot of outcomes that aren't necessarily reflected in the planning scheme or in the planning system." – UP 19

"So I'd say in the first instance it's probably more process, but then when you might get to a specific issue... So then it's a case of 'alright, how do we get...'. So, it starts I think as process, but after that you might get the strategic studies or the statements or findings and then there might be ones that are outcome-driven: So we've got a shortage of this, how do we achieve this?" – UP 24

These accounts describe strategic (urban) planning in Victoria as largely rational in practice, reflecting the accounts of Buxton, Goodman and Budge (2005) and March (2010), and the theories espoused by Faludi (1973), Baum (1996) and others (see Chapter 4).

Open space planning in practice

Open space planners are not subject to the same legislative constraints as strategic urban planners. Where planning is not tied to the provisions of the PEA, there is a noticeable relaxation of the reliance on process, with outcomes becoming of greater importance:

“It would be the council’s decision ultimately.” – OSP 16

“That’s really important that they [the community] have the opportunity to have their views but in the end we’re the experts and we should be able to make the calls of what should be in it, what shouldn’t be in it, what works, what doesn’t work... This is the thing: this is what we agreed to at the start. You can’t come back now and change your mind now as we’ve gone too far down the process.” – OSP 20

“We were telling them [the residents] you know, ‘change is hard, but this broader objectives, broader outcomes, this was long-term’, and by the last meeting they were talking about the residents being difficult and like ‘change is difficult for people, people need time to get round to these things’.” – OSP 4

“If you specify something, people often get stuck on that point and it’s hard to move away from it. Or if they go ‘that’s a really good idea’, but the point of consultation (and especially for a masterplan or an area like this) is to find out what the community needs and they want for a particular area, as opposed to going ‘this is what we think you want, you come to us’... we’ll give you some ideas, but it’s essentially about what the community wants and the needs of the area.” – OSP 6

“Well the vision establishes in part what the outcome should be. The [consultation] process is in place so people can understand or can be involved in the [planning] process.” – OSP 6

These accounts of open space planners differ from the earlier accounts of urban planners in their reference to the role of process in their work. For an urban planner, process is of greater importance due to the provisions and prescriptions of the PEA which generally underpin much of their work. For an open space planner however, those restrictions do not apply and the role of process evolves to the facilitation of desirable outcomes rather than anything prescriptive (which begs the question of what is a desirable outcome for public open space, a question I return to in Chapters 11 and 12). The process of consultation may afford the community choices, but in the end those choices are filtered through the council’s vision for “the needs of the area” (OSP 6).

Recognising the ontologies within councils

Finding 1: In his work on comparative research, Hall (2003) finds that ontology and methodology are inseparable. My research finds that this same principle applies when trying to describe councils and the plurality of worldviews underpinning how they plan different aspects of their work. Further, my research suggests that the tension between animal management and open space planners in some councils is an outworking of different ontologies and is therefore particularly complicated to address in practice.

Public open spaces are where previously unacquainted dogs and humans often meet. The extent of this meeting and its ramifications are governed largely by animal management which establishes, among other things, off-leash and on-leash areas, dog exclusion zones around sensitive environments, regulations prescribing how dogs are supposed to interact through effective control requirements imposed on owners, and requirements around dog litter collection and disposal. The planning of public open space however is primarily the domain of open space planners. In other words, whereas the interaction of humans and dogs is largely governed by animal management, often the places where these interactions take place are predominantly planned by open space planners.

Open space planners tend to focus their planning on a particular outcome that is strongly influenced by the objectives established at the start of the project. Animal management approaches vary, on the one extreme focusing on consistency of process and on the other taking into account the political landscape in arriving at a suitable outcome. When these two approaches lack consistency, the confusing ramifications are experienced by the community in regulating how dogs and the community interact in what may be incompatible public open space, these plural interpretations then being put through the community's complex filters reflecting their individual expectations or values. When both animal management and open space planners share similar ontologies, the regulation and integration of dogs in the urban environment becomes more harmonious and less conflicted, approaching a normative ideal that responds to the "geographical schism" identified by Gaunet, Pari-Perrin and Bernardin (2014, p.384).

When the council itself is in inherent disagreement over how dogs and the public realm should be treated, the community is left in a confused and conflicted state over how dogs and the public realm should interact. It could be argued that since councils are representative of the community, such councils' internal disagreement reflects an

underlying lack of community consensus on the treatment of dogs in the public realm more broadly; after all, in an ideal world, the expectations of council ought to match those of the community it represents. Information flow is imperfect however and the difference in information held by council and that held by those in the community leads to a structural difference in expectations of how dogs ought to feature and function within the community. Conflict within the community follows as people lack order to reconcile these multiple sets of values in their individual actions. Any negative perception of dogs is then exacerbated by such confusion, in turn having the potential to detrimentally affect the amenity provided for dogs and their owners, and consequently reinforcing the ‘geographical schism’ as a lack of alignment between regulation and integration becomes entrenched.

The interaction of dogs with both humans and other animals must be managed according to the requirements of the DAA. A situation with exacerbated opportunity for conflict, e.g. children playing in close proximity to dogs running off-leash, requires management and, by necessity, the animal management function steps in and regulates how dogs are allowed to function in that environment, in turn reducing the freedoms of dogs in order to abate the conflict between dogs and other public open space users. Recognising the anthropocentric nature of planning for dogs in practice, this has the potential to then reduce the amenity of dogs and their opportunity to realise their full capabilities (see Chapter 12 for further discussion on anthropocentrism in open space planning). This circumstance is exacerbated by a lack of coordination between animal management and open space planning, with a more coordinated approach contributing to the avoidance of any unnecessary conflict between dogs, dog owners and the broader community.

This section has examined how dogs are managed by both council and the Victorian government. The approaches of three key stakeholders that are responsible for animal management, open space planning and urban planning were examined, finding that the planner’s ontology and planning approach are related and tend to differ by discipline. In turn, this justifies the complexity experienced by council in planning for dogs and aptly describes the management of dogs and planning for dogs more generally as a truly ‘wicked’ problem for an urban council.

9. SAMPLING AND METHODOLOGY IN PRACTICE

This chapter applies key conclusions from Parts III and IV in preparation for my thesis exposition of planning for dogs in urban environments in Part V. In section 9.1, I establish my representative sample of councils by consolidating the thematic narratives which emerge from the various qualitative, quantitative and spatial attributes in Chapters 7 and 8. Once my representative sample is ascertained, in section 9.2 I introduce a methodological and theoretical framework to examine the descriptive accounts from councils. This robust framework underscores the importance of institutional ontologies in how planning for dogs in councils takes shape, guiding the structure for my exploratory exposition of planning for dogs in urban environments in Part V.

9.1 Developing the representative sample of councils

Chapters 7 and 8 provided insights into attributes of councils as population centres, as geographic entities and as institutions, suggesting a number of important narratives:

- responsible dog ownership and its relationship to community values;
- responsible dog ownership and council actions in planning for dogs;
- public open space and dogs;
- the role of councils in animal management; and
- drivers of council actions in planning for and managing dogs.

In practice, these narratives depend upon and interact with one another. This section endeavours to bring together the preceding analyses to develop a sample of Melbourne councils that is representative of the spectrum of attributes relevant to planning and management of dogs.

The process to develop the representative sample of councils is structured in two stages. I begin by developing clusters based on environmental attributes drawn from Table 11 (page 120); these clusters correspond loosely to different animal management approaches in practice (Table 17). Once these environmental clusters are established, I rank individual councils within each attribute and cluster to determine a set of representative councils (Table 18). Councils are then selected from each cluster predominantly by their *a priori* animal management approach deduced from content analysis of their *Domestic Animal Management Plan* ('DAMP') (see Chapter 8).

The procedure to develop the environmental clusters (the first stage) thus follows:

- Each pairwise correlation in Appendix 9 is examined for significance (where ‘significant’ is defined as a p-value < 0.05). Insignificant pairs are discarded.
- The relationships are mapped to thematically cluster pairs of attributes which strongly correlate with one another in isolation and in combination. Three distinct environmental clusters emerge from this process, broadly aligning to different animal management approaches in practice.

The emerging environmental clusters are described in Table 17:

Predominance of an <i>enforcement and compliance</i> approach to animal management	
A. Suburban environment	High interaction environment High population of adults, children and dogs, but low density Detached housing with backyards High number of incidents with dogs (including dog attacks, barking complaints and impoundments)
B. Family environment	Families with young children Home owners (rather than renters) Relatively high assets (not necessarily high income)
C. Dog ownership environment	High density of dogs to humans High rate of dog ownership
D. Larger councils	Larger councils by land area Larger number of animal management officers
Predominance of an <i>education and compliance</i> approach to animal management	
E. Affluent environment	High income High proficiency in English Relatively socioeconomically advantaged
F. Dense environment	High population density to land area High density of dogs to land area
G. Smaller councils	Smaller councils by land area Smaller number of animal management officers
H. Mature environment	Less families with young children Less detached housing and fewer backyards
No predominant approach to animal management	
I. Multicultural environment	High migrant population Fewer dogs Smaller councils by land area

Table 17: Thematic clusters of councils by animal management approach derived from analysis of pairwise Pearson correlations (source: author, from correlations and p-values detailed in Appendix 9 and raw data corresponding to the attributes described in Table 11 on page 120 and Figure 2 on page 139; reproduced in Carter (2016a)).

Animal management approaches bear some association with the environmental context within which they are situated. The interaction between environmental clusters and

animal management approaches depicted in Table 17 are broadly in accord with earlier inferences from the analysis of the DAMPs from Chapter 8, including that:

- enforcement activity is aligned with the number of off-leash parks, with the number of off-leash parks tied to the level of interaction between dogs and other members of the community;
- compliance activity is aligned with the size of the councils, the larger councils adopting a more compliance-heavy approach to animal management given the difficulty in engaging in the more resource-intensive activities of education and enforcement; and
- educational activity is weakly aligned with English proficiency and general affluence of the community, however is most aligned with either compliance or enforcement approaches. This supports the earlier accounts of educational activities commonly taking place alongside compliance and enforcement activities as part of a council's approach to animal management.

These relationships illustrate a narrative on animal management across a range of environmental contexts, suggesting a framework from which to derive a representative sample of councils. At the first stage, being the development of environmental clusters, I examine correlations between pairs of councils across a range of attributes. In order to derive the representative sample of councils, the second stage, I instead rank councils within each measure in isolation and the most extreme (high or low) councils within each measure then form the foundation of the sample pool. A qualitative overlay representing each council's animal management approach further refines the list of candidate councils for inclusion in the sample.

The procedure to develop the representative sample (the second stage) thus follows:

- Councils are ranked within each of the 30 attributes described in Table 11 together with the three measures of animal management approach derived in Chapter 8.
- Council rankings within each attribute are then collapsed into an approximate quartile scale from High to Low, with the most significant associations teased out of each thematic cluster. This identifies the key environmental cluster groups and, in turn, identifies candidate councils for inclusion in my representative sample (Table 18).

- Following my qualitative content analysis of DAMPs in Chapter 8, each candidate council's animal management approach is carefully examined in relation to other candidate councils within the cluster to ensure a sufficient variety of approaches to animal management is reflected in my representative sample of councils. At least one council is selected from each thematic cluster, this selection forming the representative sample of councils for this study.

A description of each selected council and a brief justification for each council's inclusion in the sample is provided in Table 19. The sample of councils is also superimposed on a map of the Melbourne metropolitan area (Figure 6).

Environmental cluster group	Features of environmental cluster group	Representative councils	Chosen council(s)
A B C Fewer parks	More families with children High households High enforcement Low population density High dog ownership Fewer parks	Casey Wyndham	Casey Wyndham*
A B C More parks	More families with children High households High enforcement Low population density High dog ownership More parks	Kingston Mornington Pen. Yarra Ranges	Kingston
C D Fewer parks	Larger councils More dogs Fewer parks	Cardinia Casey Frankston Melton Wyndham	Casey Frankston Wyndham*
C D More parks	Larger councils More dogs More parks	Kingston Knox Mornington Pen. Nillumbik Yarra Ranges	Kingston Knox
E F More dogs	High income High density More dogs	Banyule Bayside City of Yarra	Bayside
E F Less dogs	High income High density Less dogs	Boroondara Moonee Valley Stonnington	Stonnington
F G	Smaller councils More dogs	Bayside Hobsons Bay	Bayside
G H I	Higher migrant proportion Less families Less dogs Smaller councils	Darebin Glen Eira Maribyrnong City of Melbourne Monash Port Phillip Whitehorse	Port Phillip

* Note: I was unsuccessful in obtaining an interview with animal management at Wyndham. Thus any conclusions in respect of animal management as they apply to Wyndham are carefully and critically drawn from the documentary data alone. I believe that this gap is of minor importance on the basis that I have a rich account of animal management and planning for dogs from the seven remaining councils in my sample, along with substantial input from DEPI.

Table 18: Developing a representative sample of councils by mapping attributes of planning and management of dogs to environmental clusters of councils (source: author, with reference to Table 17).

Sample council	Reasons for selection
Bayside	Bayside has substantial open spaces and documents much conflict between dogs and the community at large in its DAMP (Bayside City Council 2012a, pp.11,14,20,21) however appears to adopt a different approach to neighbouring Kingston in managing animals in its municipality (see Figure 2 on page 139).
Casey	Casey is the most populous municipality in Victoria and is therefore worthy of attention in its own right (2011 Census). Similar to Knox, Casey has established a ruling whereby all parks are off-leash parks unless signed otherwise.
Frankston	Frankston is an outer suburban metropolitan centre with strict rules around dogs in public places (specifically, their rule of 'no dogs allowed' in the Frankston central activity district). Frankston provides a contrasting case to other foreshore councils of Bayside, Kingston and Port Phillip due to their relatively stricter dog controls.
Kingston	Kingston has the highest 'measurement' of enforcement activity according to Figure 2 (page 139) and as such particularly stands out amongst its peers. It has substantial exposure to beaches, yet appears to have a different approach to managing animals than either neighbouring Bayside or Frankston.
Knox	Knox is home to the second largest number of off-leash parks (second to Casey) and successfully established a purpose-built dog park. The council is considering a second dog park with the various deliberations and decisions framed in council discourse (Knox City Council 2013, p.16). All parks are off-leash parks unless signed otherwise, as with Casey.
Port Phillip	Port Phillip is the inner-most foreshore council with a high population density and heavily contested public open space. It is home to the important Albert Park space which plays host to the annual Australian Formula 1 Grand Prix, making the governance and management of open space particularly challenging. Whilst the population of dogs per capita is low in comparison to most other metropolitan councils, many local dogs and others from neighbouring councils visit the foreshore and Albert Park, making planning and management of dogs particularly important in Port Phillip.
Stonnington	Stonnington is philosophically 'pro-animal', inferred from the language and activities documented in their DAMP (City of Stonnington 2013, p.1). Stonnington has a particular focus on whole-community consultation when proposing changes that relate to dogs.
Wyndham	Wyndham is Victoria's fastest growing council (Wyndham City Council 2013, p.4) and home to a number of greenfield housing developments. Open space is particularly contested, with a need for more formal sportsgrounds to support the municipality's growing population of families with children and teenagers.

Table 19: Eight councils selected as being representative of Melbourne's planning and management of dogs (source: author, derived from the mapping of attributes to councils in Table 18).

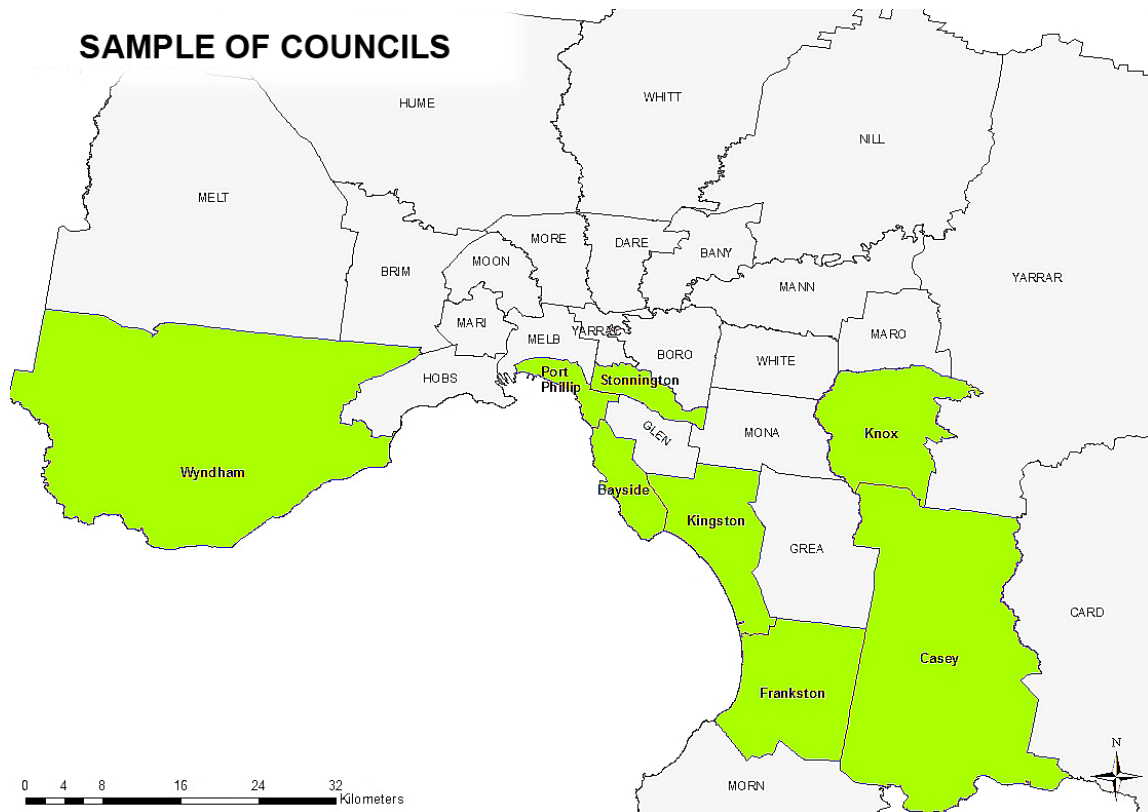


Figure 6: Location of eight councils representative of Melbourne’s planning and management of dogs (source: author, using ABS (2011a) cartographic boundary files, as published in Carter (2016b) and adapted for Carter, Day and Fryd (2015) and Carter (2016a)).

9.2 A theoretical framework to examine planning for dogs

This section consolidates the conclusions of Parts III and IV and introduces a theoretical framework for the exploratory thesis exposition which forms Part V. Planning for dogs brings together a number of professions which in many cases work independently without common goals or interests in relation to dogs. Issues arise when each professions’ individual work, whether it be function, priority or objective, are in collective conflict. If councils are viewed only as a whole, analysing their decision-making process in respect of planning for dogs becomes a mess of conflicted voices and motivations, the decisions themselves then become hopelessly confounded with internal council politics and power structures. The contest of appropriate and balanced land use, an actual and proverbial turf war, needs to be acknowledged as integral to planning for dogs. Consequently in order to observe how planning for dogs takes place, I focus on each profession separately and develop narratives that shape how and why planning for dogs takes place the way it does. The council meta-narrative then emerges as a singular

product from these professional narratives, where macro-themes emerge from the accounts of individuals, shaping the narrative of the concluding chapter.

In Chapter 8, I introduced the idea of Hall (2003) that ontology and methodology are inseparable in comparative research and adapted that idea to the planning work of councils in the context of planning for dogs. This analysis revealed a spectrum of approaches to planning, from process-focus to outcomes-focus, as analogous to the ontology of the planner and profession. My argument demonstrated that the apparent incompatibility between different professions within a council is real and present, manifesting in the tension between integration of dogs on the one hand and regulation of dogs on the other: the “geographical schism” of Gaunet, Pari-Perrin and Bernardin (2014, p.384).

This tension within councils to institutionally affiliate on the one hand and a tendency to professionally conflict on the other defines the internal ontological structure of councils. My exploratory approach examines the component parts of this structure through the unique and individual voices of the professions, in accord with the functional organisation of council and how the professions work in practice. The theory which I develop emerges from the individual accounts of professions across councils rather than from any abstract or thematic groupings of data which examine both councils and professions simultaneously. By respecting both the interdisciplinarity of planning for dogs and the inherent ontological structure of councils, I have distilled the unit of qualitative comparison to simply ‘council’, rather than confounding the effects of ‘council’ and ‘profession’ by examining councils as a whole unit. The grounded theory which emerges from the data can then be understood within that robust frame of reference.

In Part V, my examination of planning for dogs in practice is thus constructed by discipline. Through my operationalisation of justice for dogs in Chapter 6 and the understanding of the practice and ontology of planning for dogs in Chapter 8, the professions of animal management, open space planning and urban planning emerge as central to planning for dogs in the urban environment. Importantly, the composite discipline of planning for dogs in urban environments (as depicted in Figure 7) is not a uniform exposition of each underlying discipline in turn. My careful application of the methodology laid out in Parts III and IV has led to an ordinal and somewhat uneven

narrative on planning for dogs in urban environments. Accordingly, I begin with a focus on animal management and planning, then proceed to incorporate open space planning and, finally, turn to urban planning. That planning for dogs in urban environments has animal management planning as a central concern is not surprising; after all, a primary role of an animal management officer in a Victorian council is to plan for and manage dogs and other domesticated animals within their

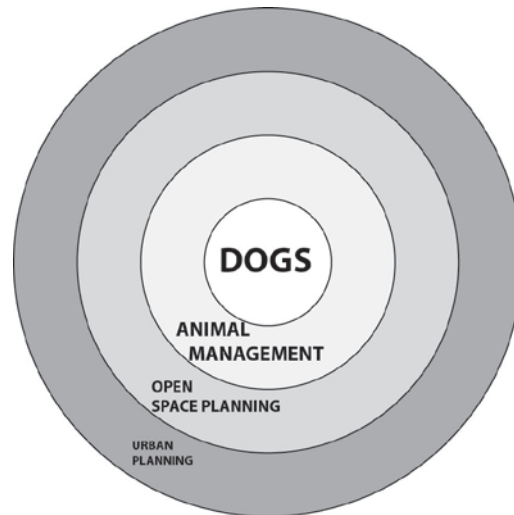


Figure 7: The composite discipline of planning for dogs in urban environments (source: author).

jurisdiction. In land use planning discourse, dogs regularly feature in public open space planning discussions, primarily as a subject with ancillary importance inherited from their owner. Urban planners on the other hand are found to be the least concerned with dogs, speaking of dogs as an indirect subject of urban planning at best. My thesis structure in its order and emphasis is a direct consequence of the inherent structure of the components which comprise the discipline of planning for dogs in urban environments.

In Chapter 10, I examine the role of both council and Victorian government animal management regulators in order to establish a benchmark of current practice of management and planning for dogs in the community. My analysis of the animal management narrative is grounded in the themes of education, compliance and enforcement which emerged from the earlier examination of each metropolitan council's *Domestic Animal Management Plan* (see Chapter 8).

In Chapter 11, I establish why there is a need to plan for dogs in a broader sense, examining need as both an obligation to act and a demand for such action from the community. I begin by exploring the legitimacy of claims which dogs and dog owners have in their use of public open space and their access to the community more generally. This leads into a discussion on the drivers of demand for amenity for dogs more generally, exploring the push-and-pull contest of land use contrasting an ever-urbanising and densifying community. This chapter lays the foundation for my

examination of the roles of open space planners and urban planners in planning for dogs in subsequent chapters.

Consequently, in Chapter 12 I turn to examine the role which open space planners play in planning for dogs in urban environments. Councils lack consensus in how they ought to plan public open space for dogs, this reflecting in the myriad of practices and attitudes toward planning for dogs observed across my sample councils. The ‘othering’ of dogs becomes apparent in discussing the creation of public open space, this overtly introducing the language and actions of anthropocentrism in planning public open space for dogs.

Following on from my discussion of public open space planning and dogs, in Chapter 13 I examine the role of urban planners in planning for dogs in the broader community within the context of the Victorian planning system. I find that urban planning as a profession lacks concern for dogs for a number of reasons, these largely reflecting an attitude of anthropocentrism in the practice of planning. Four sequential hurdles emerge that define the structured consideration urban planners implicitly or explicitly afford dogs in the decisions which they make on the dog’s behalf in theory and practice.

In Chapter 14, I conclude my thesis by constructing a narrative of justice for dogs, reflecting on both normative and practical implications of the emerging themes and findings in Part V. In this chapter, I revisit my underlying research questions and reflect on the outcome of my study in the context of an applied justice for dogs. My thesis closes with an appraisal of the significance of this work and in doing so I discuss implications of this on future research on the subject of planning for dogs.

PART V: RESULTS AND DISCUSSION: PLANNING FOR DOGS IN URBAN ENVIRONMENTS

10. ANIMAL MANAGEMENT AND DOGS

“But what constituted the proper control of a dog was, as magistrates found, always at best a moot point. Whilst policemen and park keepers often interpreted this as a requirement for *either* the muzzle *or* the leash, dog owners might and did think differently.”

- Howell (2012, p.234), on the regulation of dogs in nineteenth century London

This chapter⁷ provides a critical account of how animal management takes place in Melbourne, its findings leading to a number of recommendations that aim to improve both the welfare of dogs and opportunities for dogs to flourish in urban environments. Having explored the relationship between ontology and planning approaches at council in Chapter 8, in this chapter I proceed to examine how the planning for and management of dogs is undertaken in practice.

In section 10.1, I explore how governance affects dogs by focusing on the *Domestic Animal Management Plan* (‘DAMP’) as a primary document which describes both planned actions of councils in managing dogs in their communities and the environmental and structural factors that affect those planned actions. Firstly, the influence of state-level uniformity and council conformity is examined as to how the DAMP translates into action at a local level. This leads on to a related discussion examining the commitment of each council to carrying out their planned actions in their DAMP, this commitment being particularly controversial as relying on both a financial and philosophical commitment to provide for dogs in the community. The DAMP is a curious construction of inputs of both council and state, perhaps dominated by state-level considerations, leading to an important discussion on how the councils and the Victorian government work together through the DAMP to achieve outcomes which improve the welfare of dogs in the community.

Following this analysis, I then turn my attentions to the governance challenges which face councils in animal management. Earlier in Chapter 8, I examined 30 DAMPs from across metropolitan Melbourne and found that councils primarily act with a particular mix of educational, compliance and enforcement focus when managing domestic

⁷ Note: The contents of this chapter have been adapted and published in Carter (2016a).

animals in their communities. This provides a useful framework through which to examine the challenges which councils face in planning for and managing dogs in their communities. This then forms the structure of the remainder of this chapter.

Councils face a number of regulatory challenges in managing dogs in the community, these being discussed in section 10.2. There are many different sets of regulations introduced by various local laws that underlie the overarching state legislative framework, these varying between councils for one reason or another, sometimes with sound justification and other times not. The expectations of council and the community may lack alignment, perhaps in part due to the myriad of regulations, generating both confusion and tension as the community seeks to understand both what particular regulations are and why particular regulations are in place. Two particularly common yet contentious regulatory dilemmas are examined, one being the regulation of effective control and the other being the regulation of barking dogs. The analyses lead back to questions of ontological alignment with the overall planning and management approach, tying back to earlier discussions in this chapter.

In addition to regulatory challenges, section 10.3 describes a number of challenges faced by both councils and the Victorian government in helping both dog owners and the community at large to improve their overall awareness of dogs. These challenges include both the breadth and depth of education programs offered and how to most effectively communicate the messages to the target audiences. Of critical importance to the success of the programs is the extent to which councils and the Victorian government work together to achieve their important and often common goals of animal welfare and community safety. Education programs are a key risk management tool of government to ensure that community safety and animal welfare messages are communicated. Issues identified with the Victorian government and council education programs are directly related back to earlier findings in this chapter.

Animal management is a complex but often isolated function in councils. Planning for dogs in urban environments is often done as a discrete exercise, with few if any links to other more conventional plans like the *Council Plan* or the *Municipal Health and Wellbeing Plan*. This chapter aims to build a detailed, contemporary overview of how dogs are managed and planned for by councils in Melbourne and the Victorian

government, why they are managed and planned for in that way and how that management and planning might be improved.

10.1 *Domestic Animal Management Plans*

In understanding how governance affects dogs, I begin by focusing on the *Domestic Animal Management Plan* ('DAMP') as a primary document which describes both actions of councils in managing dogs in their communities and the environmental and structural factors that affect those actions. This section critically examines how councils plan their animal management using the DAMP and whether this planning process could be improved.

A DAMP is prepared by every council in Victoria and is required under section 68A of the *Domestic Animals Act 1994* (Vic.) ('DAA'). This section prescribes the form of the plan, its content and how frequently it is to be produced, among other things. Within each prescribed subject, the DAA requires the council to provide a four-year plan of actions to address any issues or take advantage of any opportunities identified by the council. The action plans may or may not be segregated by years, however most councils do so in line with their annual planning cycle. The report is finalised, signed-off by council and passed to the Department of Environment and Primary Industries ('DEPI') for review and comment.

The DAA itself does not provide a rationale for the purpose of the DAMP. However according to DEPI, the Victorian government department that is responsible for the DAA, the objectives of the DAMP are broadly to provide consistency in compliance with the DAA across councils, to give each council greater control, and to provide an opportunity for animal management officers to gain traction and an audience with both council and the community which they otherwise might not have had.

My study finds that the DAMP may not be achieving these objectives consistently. Some councils raise concerns over the efficacy of the DAMP in their particular context; these concerns usually focus on the related themes of relevance of the DAMP to that council and commitment to the DAMP by that council, particularly in respect to the development and success of the mandatory four-year action plans. Many animal management officers in my sample felt that their council has little, real input into how animal management takes shape at a state-level and consequently they express a degree

of disenchantment with DEPI more generally. I argue that this contributes to a common lack of buy-in by councils to their DAMP and a relative lack of resourcing given to animal management by council more generally.

The remainder of this section examines the DAMP through the emerging nested themes of uniformity and conformity, commitment, and inter-government relationships, leading to a number of recommendations which aim to improve the welfare of dogs in the urban community.

Uniformity and conformity

Finding 2: The *Domestic Animal Management Plan* ('DAMP') is prescribed by the Victorian government to uniformly direct animal management planning across all metropolitan and rural councils in Victoria on subjects of interest to the state; however animal management is a localised function in both theory and practice under the *Domestic Animals Act 1994* (Vic.) and calibrated to the local context through local laws. The DAMP is fundamentally a confused document, with a peculiar focus on state-based issues whereas the animal management function is embedded in the local context. I contend that this disconnect substantially reduces the relevance of the DAMP to councils.

The DAMP focuses on a number of areas of concern common to all councils, including animal management officer training, registration, nuisance, dog attacks, impoundments and euthanasia. The DAMP however suffers from a focus on areas of political interest, particularly on the regulation of dangerous and restricted breed dogs that make up less than 0.1% of dogs (some councils even have no declared dogs). DEPI recounts their experience:

"What we found though was the politics of dangerous dogs, you know, dog attack in the newspaper and restricted breed dogs, has for a number of years dogged our footsteps and has taken up an inordinate amount of our little group's time... but the need to change legislation and do something... For example with restricted breed legislation, we even went to the point of doing two reviews and both of those reviews said it was bad legislation, but the government couldn't politically do it [change or repeal legislation]. So a lot of resources have been spent doing that sort of work, in dog control... talking restricted breed dogs, you're talking 0.04% of the dog population. So all our resources are going into that where that same money should be used for education, council training, council resources..." – DEPI

Despite this, DEPI asserts that the DAMP is a document that empowers councils to take control of their animal management plans. Councils are however shackled in large part to the prescribed content which largely reflects state-level priorities, perhaps to the point

of distraction, leading to a document which does not necessarily focus enough attention on areas that are important to each council's day-to-day management of dogs. The attention given to restricted breed and dangerous dogs in particular highlights this disparity.

As another common example, the DAMP fails to prescribe any explicit commentary or actions relating to dogs in public open space. Public open space is an extremely important part of the urban environment where dogs socialise with the world around them (for an extended discussion on public open space and dogs, see Chapters 11 and 12 in particular). A number of councils include such commentary and plans in their DAMPs as part of a generic 'other' section, but there is no requirement in the DAA to include such matters. Regulation of access of dogs to public open space falls under section 26 of the DAA, however DEPI has not adapted the DAMP to include discussion on dogs in public open space "because of the way it sits in the [Domestic Animals] Act" (DEPI Interview).

This patchy treatment of dogs and public open space through the DAMP potentially leads to inconsistencies between councils as to the extent to which dogs and public open space are a focus for local regulation, control and concern. State-level priorities could dominate these issues of local importance, detrimentally affecting the relevance of the DAMP to the council and the local community. This consequentially could impact council buy-in and commitment to the DAMP and animal management more generally, in turn potentially hurting the welfare of dogs.

Indeed, the uniformity and consistency of DAMPs across Victorian councils may become more pronounced with the following planned activity of DEPI:

"What we were going to next was we were going through their DAMPs, picking out the best ideas and we're going to link a lot of ideas, like have a reference library of things that have been done, like best practice, that they could consider." – DEPI

There must be a trade-off between consistency across councils and relevance within councils. By developing a menu of 'best ideas', DEPI is creating an environment with a more uniform treatment of dogs across councils. On the one hand, this offers dogs similar opportunities regardless of where they live. On the other however, by potentially lacking local context and relevance it may sacrifice what little commitment

councils currently provide to their animal management functions. This initiative warrants further thought before implementation.

According to DEPI, an important objective of the DAMP is to enable councils to evaluate and assess their own performance. In theory this may be true, however it does rely on the council committing to executing the action plans in the DAMP both financially and philosophically. Such commitment relies on the DAMP to be relevant and interesting to the council and reflective of the council's own environment and challenges and failing that, the efficacy of animal management planning in a broader sense suffers as a result.

Commitment

Finding 3: The lack of relevance of the DAMP to councils in general leads to a lack of commitment to the DAMP action plans by councils. The four year plans are over-engineered on the basis that councils rarely commit financial or other resources to support the plan on inception nor do they generally do so down the track, making the DAMP action plans largely undeliverable.

Following on from my argument that the DAMP lacks local relevance for many councils due to an overbearing focus on state-level priorities, I now examine the influences of this on the level of commitment to animal management and the four-year action plans in the DAMP. According to DEPI, a primary objective of the DAMP is to improve the traction which animal management planning has within each council and, in doing so, broaden the image of the animal management officer beyond the traditional stereotype of 'dog catcher':

"You'd have to say that prior to us introducing the concept of a *Domestic Animal Management Plan*, it was extremely difficult for the council officers to get traction with council. You could go to most councils and find a few by-laws with regard to stray dogs and dangerous dogs and that was it; whereas now, every council has on its website a quite comprehensive document." – DEPI

This section explores the commitment councils make to realising their DAMP vision. In practice, many councils fail to have the resources to do more than the bare minimum animal management services, this often resulting in an almost singular focus on reactive enforcement activities like dog attacks despite the activities proposed in their DAMP. DEPI acknowledges that the four-year action plans are undermined by a general lack of commitment from some councils in financing and resourcing the actions over the plan horizon as animal needs compete against human needs:

“So it depends. A lot of councils have got no resources or insufficient resources to do everything, so they make decisions on whether they’re going to put the extra \$500k into animal management or something for humans in kindergartens, and the politics of it dictates...” – DEPI

The implication of anthropocentrism in council is supported by the following poignant observations, these remarks demonstrating that the prioritisation and elevation of human issues ahead of animal issues affects the financial commitment from council to the DAMP action plan (i.e., anthropocentrism in council; see Chapters 12 and 13):

“It’s a number of things: there are greater issues in the community. There is a legislative requirement that this, that and the other happens anyway, so why am I holding an event to try and educate and communicate that need to the community when I’ve got an enforcement power just to make it happen anyway? But then when I try and enforce, the council says, ‘No, because we want to do X, Y and Z’ as in the DAMP. So there’s a level of commitment to the process, but then there’s no follow-up to make sure. So they agree to the DAMP, but then there’s no funding allocation to make the things in the DAMP happen.” – AMO 8

“We had a budget of about \$12,000, and I said, ‘Are you serious, guys?’ and I asked for \$20,000 extra for the first year. I said, ‘But make no mistake, I’m going to be back next year and want another \$15,000 and the year after another \$15,000, until we’ve got about \$80,000 to run this event, successfully meeting our statutory requirements.’ And they really baulked at it. My argument was you’re getting \$1.5m out of the community for registrations: do you not think you should put some of it back to the dog loving community to give them a reward for what they’re paying and actually give them an opportunity to learn something?” – AMO 21

This lack of appetite of council to undertake preventative (proactive) actions for animals on the basis that enforcement powers exist would arguably not be the same if the subjects were humans; as a case in point, many crime prevention programs exist. Animals are provided with essential enforcement services rather than supporting preventative programs which might improve their welfare in the future and reduce the need for future enforcement.

More generally however, animal management can struggle to gain financial support to carry out the DAMP action plan, despite this plan being agreed with council. The outworking of this is that perhaps only the ‘low hanging fruit’ or the ‘little things’ are done in order to make progress; as a result, any preconceived prioritisation of actions in the plan vanishes as illustrated below:

“To tell you the truth, it’s not actually working. It’s become problematic in delivering the service. We’re trying to pick the low hanging fruit as it were, where we can try and get some runs on the board. Trying to identify which ones will be done and which ones will drop off the perch as it were is a difficult thing to do; purely and simply, and I keep going back to this, it’s the resource issue. And trying to deliver what we’ve put in our plan would be wonderful to achieve and I can see so many benefits associated with that, but unfortunately delivering that is another issue in itself.” – AMO 2

“...but in general because of limited resources, we can’t do it all. So we stick to this and we just, you know... and other than that it’s really the education and enforcement activities that we undertake and improving little things, like making it easier for people to register their pets and learn about responsible pet ownership. But no great big project or activity... [other projects] would deviate from this, because this is what we’ve agreed to do.” – AMO 1

Is this relatively common failure to fulfil their documented action plans a case of councils wanting to “big-note themselves” by creating action plans that include things for the sake of “what the government wants to hear” (AMO 3)? As alluded to in the previous argument, the answer to this question is confounded by the prescribed structure of the DAMP in terms of topic and content. By its nature, the DAMP action plan may be including things of ‘what the government wants to hear’ but in a technocratic manner. In doing so, the plans then become less relevant to councils through understating their local context, leading to ongoing funding challenges, as in the following examples:

“To tell you the truth, in the end it ends up being a ticking the box exercise because we’re mandated by the *Domestic Animals Act* to have a *Domestic Animal Management Plan* in place. There is no funding whatsoever from the Bureau of Animal Welfare, from DEPI, and there is certainly no funding from *** [the council] to deliver these things.” – AMO 2

“So the DAMP’s done in Year 1. It goes for five years [but] nobody’s made a commitment to the DAMP. Although it’s agreed to, there’s no funding or budget that forms part of the DAMP. It’s just a wish list of what we want to occur.” – AMO 8

These accounts describe a fundamental flaw of the DAMP as being the independence of the animal management planning and funding processes, where the plans are made but remain largely unfunded. The DAMP action plan is established in advance of when the planned actions are scheduled to be undertaken and, with the expected passing of time, the plan reduces to a ‘wish list’. Without financial commitment, the action plans in the DAMP simply cannot be carried out.

Whereas a number of interviewees said little or remained silent on how actions in their DAMP are funded, one council in my sample is observed to fund the DAMP actions each year apparently successfully through their budget process. This success is self-attributed to their own skill in choosing what to include in the DAMP and, importantly, not “just putting something in the DAMP plan because that’s what the government wants to hear” (AMO 3), rather making the plan more relevant to their local context. Expressed another way, this council is directly linking its (greater) financial commitment to the DAMP from the council to the greater local relevance of the plan to the council by its very construction. This outcome supports my contention that greater financial commitment from the council is tied to greater relevance of the plan to the particular context and issues faced by the council.

According to DEPI, one of the primary purposes of the DAMP is to empower animal management officers and provide them with opportunities to gain support in council for their planned activities. The DAMP structure precludes a free discussion of animal management however, instead directing the animal management officers’ focus toward subjects of state-level importance. This detracts from the relevance of the plans to council and, hence, the council’s willingness to financially commit to the plans. The ability of the DAMP to empower animal management officers in these circumstances is thus severely constrained.

Inter-government relationships

Finding 4: Lacking both relevance and commitment, the DAMP is seen as only a statutory requirement by many councils. Councils feel they have little opportunity for meaningful contribution and input into any state-level policy development processes, thus reducing any ownership of the DAMP which ostensibly reflects the Victorian government’s position on what to focus on. Much of this appears to arise from a disparity between DEPI’s perceived role and its actual role and, overall, this is seen to contribute to a commonly neutral-to-negative view held by councils of the role of DEPI in animal management.

I have argued that the DAMP lacks relevance to a number of councils, this deficiency being driven by a focus of the DAMP content on state-level priorities and leading to downstream issues with financing the planned animal management activities. This prompts me to consider the nature and extent of input which councils have in state-level policymaking and legislation and its consequences. An apparent lack of collaboration between councils and DEPI on animal management issues leads to a DAMP that does

not necessarily reflect the local animal management context accurately and contributes to a neutral-to-negative view held by councils of the role of DEPI in animal management.

According to DEPI, one advantage of developing a DAMP is that it presents an opportunity for councils to formally consult with the community on issues of animal management. In practice, councils generally do voluntarily consult with their communities and key stakeholders on the subject of animal management during the development phase of the DAMP. Thus the DAMP process has arguably improved the council's engagement with the community on animal management issues. In theory, incorporating input from the community ought to create a DAMP that focuses greater on the local context and in turn makes it more relevant to council.

A fundamental flaw with the DAMP however remains its priority focus on state-level issues, a particularly strong filter which influences local animal management planning. These state-level priorities may be of some interest to the local communities, but they appear to lack appeal to councils as measured by their financial commitments to the resulting action plans. In other words, no matter how much buy-in the council gets from the community, the actions still focus on state-level priority areas. From the outset, the issues covered in the DAMP are largely standardised by DEPI with what appears cursory input from councils, for example:

“When we go to meetings... and I’m not alone here, I’m with other councils... when we go to meetings with DEPI, we quite often feel that we’re being spoken to, not consulted, and there’s very little consultation in that process. Laws change, codes of practice change, and I can say this, no consultation with local government whatsoever. And we’re expected to deal with it.” – AMO 2

“Do you know what their consultation process was? To come out, make an appointment with me. We went into a room here and I said, ‘Can I have some pre-reading before we meet with you?’... ‘No, you can’t.’... They turned out with a document that I couldn’t look at. I was read a series of questions, answered the questions with *** [senior council officer], and when we concluded that I said, ‘Can I have a copy of my responses to the questions?’... ‘No, you can’t’... and they left. That’s the level of DEPI consultation and that consultative process is what amended the [Domestic Animals] Act. My sense is they’d already worked out what they wanted to do, they needed to tick off so many councils that they consulted and that’s how they did it.” – AMO 21

Diagnosing the root cause of these communication breakdowns confounds both the nature of the state-local government relations and the nature of the expectations of

individuals involved in these particular meetings. The structure of the DAMP, which largely reflects state-level priorities, nevertheless plays a role in determining the nature of the relations between DEPI and councils more generally.

Of note however, one interviewee positively fed back that the Victorian government appear to selectively and slowly take on board recommendations from council; nevertheless, DEPI appears cautious in what parts of the legislation they choose to standardise without communicating a clear reason to councils for their decisions:

“[The Victorian government] will listen to council’s recommendation on how to improve the legislation and to fix up any loopholes that officers on the ground are coming across when actually enforcing the legislation. The state government are not always quick to amend or improve the legislation and do not seem to want to standardise some parts of the legislation.” – AMO 12

This interviewee begs an important question of what aspects of animal management should be standardised across all 79 metropolitan, township and rural councils in Victoria. If the Victorian government is disinclined to standardise parts of the legislation and instead opts to leave it to individual councils to set their own local laws, there is reduced need for consultation between DEPI and councils. This lack of standardisation provides the state with financial economies at the expense of councils which already commit little financially to animal management functions, in turn exacerbating any tensions which already exist between councils and DEPI.

It remains to examine whether this reduced role of DEPI is commensurate with what councils expect of the state. Through their Bureau of Animal Welfare, DEPI provides a range of the domestic animal management services to councils:

“We’re responsible for developing the policy and legislation in that area. So we liaise with councils, we have training programs with councils... regional training programs five times a year, that’s a big effort for us... where we actually brief councils on our education programs, by that the new legislation or how to interpret the legislation. And we actually have officers assigned to just advising local government officers because they’re changing over quite a bit and that’s a problem too: to maintain a core of people who really are experienced and know how to handle situations.” – DEPI

From this remark alone, DEPI appears to struggle with resourcing their animal management function and relies on councils to fulfil a number of functions as a result. Councils express similar concern and confusion with the role that the Bureau plays in

animal management, in terms of both strategy and their impact on the ground, as typically illustrated by this interviewee:

“...or they’re simply under-resourced and they don’t have the capacity to engage? I don’t know how big the Animal Welfare Bureau is... I don’t even know... Are they so lean and tight they’ve got no capacity to do anything more than just whatever it is they do?” – AMO 21

The difference in expectations between DEPI’s actual role and their perceived role creates uncertainty and tension between councils and DEPI. Councils feel the brunt of this confusion since it affects their work in the community. Given the lack of involvement of councils in the work of DEPI, it is unsurprising that DEPI seems largely unaware that such tensions exist.

Improving the welfare of dogs through the *Domestic Animal Management Plan*

Undertaking the various actions detailed in DAMP action plans as they presently stand ought to improve the welfare and perception of dogs in the community. The plans however often lack financial and philosophical commitment from councils due to their focus on state-level issues, in turn contributing to a weaker relationship between councils and DEPI. I argue that in order to improve commitment to the DAMP action plan, it needs to become more relevant and local to the council and community. In turn, this may involve councils having the freedom to adjust emphasis on certain aspects of their animal management, irrespective of state-level priorities and programs and the broad remit of the DAA.

Recommendation 1: The DAMP content should be less prescriptive than outlined in section 68A of the *Domestic Animals Act 1994* (Vic.), instead inviting councils to prioritise the areas of focus themselves rather than rely on state-level areas of focus that may not be as relevant to their local situation or context.

This recommendation would bestow each council with a greater sense of ownership of the plan and improve the financial and philosophical commitment of council to making the plan work, thereby improving the welfare of dogs in the community. The DAMP would reflect more closely what animal management activities the council actually undertakes, allowing DEPI to better identify where true deficiencies in animal management lie. As a result, the interaction with DEPI and each council ought to become more regular and sensitive to the context of each council. With a greater sense of ownership, each council ought to be open to reviewing the plan as necessary to

incorporate any possible weakness. This, in turn, will hopefully foster a more collegial relationship between councils and DEPI.

Recommendation 2: Through consultation with councils, I recommend that the Bureau of Animal Welfare develop a service charter or statement that details what the Bureau's role and responsibilities are in relation to domestic animal management and how those are distinct from the council's role and responsibilities. This will then make clear to councils and DEPI what the Bureau does do and doesn't do and, having clarified mutual expectations, both DEPI and councils can better resource animal management functions accordingly.

A clear identification of the Bureau's roles and responsibilities in respect of animal management would enable each council to articulate where its role ends and the Bureau's role begins. Such a charter or statement ought to better align the expectations of councils and the Bureau, removing tensions and increasing the flow of information and knowledge through more constructive engagement. In time, this ought to improve the perception of the Bureau and DEPI.

Improving clarity around the respective roles and responsibilities of councils and DEPI will consequently enable more accurate budgeting of expenses and, in turn, better calibrate the amount of registration fees and state levies collected. The Bureau has very limited resources at present and it might be determined that more staff are needed in order to better localise domestic animal management in councils and the community, leading to a possible increase in the state levy or other financial support from the state or directly from councils. The recommended statement or charter could contribute to a business case for such an increase in levies, fees or other revenues. Recommendation 3 below outlines an opportunity that would require such expansion and cooperation between councils and DEPI.

Recommendation 3: I recommend that DEPI appoints a number of regional project officers to work full-time from a number of 'host' councils located around Melbourne to improve the sharing of information and knowledge and foster stronger working relationships between DEPI and councils. If the program is deemed successful, it can be rolled out regionally in time as resources allow.

Whilst they remain DEPI employees, these project officers could be funded in part by a levy on councils, as the officers are there to support councils in a particular region as shared animal management project officers.

I propose that these regional DEPI project officers be responsible for embedding DEPI's work into councils and local communities, acting as the liaison between their regional councils and the wider DEPI staff. In particular, the project officers would be well-placed to implement DEPI's various programs on community education and responsible pet ownership.

More profoundly, councils largely plan and operate independently and, despite often having different local laws, each ultimately faces similar issues in regards to animal management. These project officers will bring together some common elements of animal management programs from councils across their region and, in particular, help councils develop stronger proactive capabilities in the education space. This recommendation aligns in part with contemporary thoughts expressed by some interviewees:

"All of this comes back to DEPI in my mind. Fund some project officers in council so that councils with funding can engage project officers, develop some of these projects and increase the knowledge base to actually share that amongst local governments." – AMO 21

"The state government (DEPI) have only one liaison officer for all of Victoria for all DAA related issues. This person is overstretched. It would make sense for DEPI to have three or four liaison officers who have specialist knowledge and experience. For instance, rural Councils have totally different dog issues concerning livestock etc. than a metro Council. Those Councils such as *** who have a foreshore that dogs are allowed on also have different problems." – AMO 12

Together, recommendations such as these ought to strengthen the animal management capabilities of councils, increase the efficacy of DEPI in communicating its messages and, most importantly, improve the welfare of domestic animals throughout Melbourne.

10.2 Regulatory challenges

My analysis of the DAMPs of 30 metropolitan councils classified the animal management function of councils as comprising a mix of educational, compliance and enforcement activities (see Chapter 8). Accordingly, this section focuses on regulatory challenges as they relate to compliance and enforcement activities of council. Following this, section 10.3 focuses on educational challenges, in particular challenges around community education on the subject of dogs.

Plurality of local regulations and their impact on dogs

Finding 5: There is unnecessary complication in animal management introduced by excessive local differentiation of regulations relating to the management of dogs throughout Melbourne. This leads to confusion in the community of what the local regulations and ordinances are in respect to dog management and adds a barrier to transferability of animal management officer resources and skills across metropolitan councils. Both welfare and outcomes for dogs can then suffer as a result of poorer perceptions of dogs in the community.

Section 26 of the DAA empowers councils to make local laws regarding off-leash areas, effective control and other requirements for dogs in public open space and the broader public realm. In terms of the provision of services and amenity for dogs however, the DAA remains silent and defers to councils to make these decisions in the interests of their communities. DEPI acknowledges that council services and amenity need to cater for local conditions and thus remains broadly reluctant to prescribe uniformity at a state-level in terms of services provided by each council:

“So you could move a little bit... You could actually start to require more provision for something to be done, but I don’t think the [Victorian] Government would want to be in the position of dictating to the councils what services they should provide to their community. If anything, the state government, well my department, would probably prefer it to be somewhere else because the *Domestic Animals Act* brings in all those restricted breed dog/controversial issues, puppy farms and control...” – DEPI

Consequently, a number of councils provide plentiful amenity for dogs whereas others provide a bare minimum, leading to very different outcomes for dogs. Councils similarly manage dogs differently with their management approach driven by the ontological alignment of each council towards animal management on a scale of process to outcomes (see Chapter 8). The outcome for dogs varies based on fundamental decisions which councils make.

With a process-focussed model of animal management, the degree of variation in animal management practices between individual councils in Melbourne is surprising and ultimately unnecessary. The individual nuances that make each council and community special might influence the occurrence of particular incidents like nuisances, attacks and the like, but should not influence the management of those incidents. The process-focussed model is utilitarian, where the outcome for the community supersedes

the outcome for any individual and the measure of goodness relates to the correct execution of the process rather than any individual outcome.

With an outcomes-focussed model of animal management, the differences in regulation are less surprising; the sheer variety of regulations across Melburnian councils however seems to hint at a greater than ideal degree of difference. For example, there need not be up to 31 distinct regulations that restrict dogs near playgrounds or 31 distinct processes to manage barking dog incidents. Whilst process can be tailored to an extent to fit a council's desired outcome, fundamentally the incidents are only variable in degrees. That is to say, even if the council adopts an outcomes-focussed model of animal management, there are only a limited variety of possible outcomes in practice.

Most councils in my study adopt a process-focused model of animal management, however they have different regulations which vary their process or parameters. The effectiveness of animal management officers is impaired where the regulations are difficult to explain and complicated to enforce; for example, the unique default off-leash ordinance of Knox and Casey stands apart from the remaining 29 metropolitan councils (see Chapter 11). Furthermore, some councils regulate dogs to the 'nth degree' whereas others regulate minimally in comparison. These regulatory differences confuse the community and produce a range of community expectations within and across councils, potentially affecting the perception of dogs in the community in a negative way.

Complicated local regulations also lead to difficulty in planning for dogs. When planning for dogs in public open space, planners should be at the very least conversant in the basic rules of their municipality in relation to dogs given dog use is one of the most popular uses of public open space in many councils (e.g., Bayside City Council (2010, pp.87-8), Knox City Council (2012a, p.326), City of Port Phillip (2009a, p.23)). A number of open space planners that I interviewed did not have an accurate, working knowledge of how dogs are regulated in their municipality (e.g., a lack of working knowledge of local off-leash ordinance affecting public open space, in particular that affecting playgrounds and sportsgrounds). A lack of accurate knowledge on the part of open space planners creates mixed expectations within council as to how public open space is used and leads to a disparity between community and council expectations, generating potential conflict both within council and between council and the community, in turn detrimentally impacting the perception of dogs in the community.

In its current structure, the DAA permits such a range of approaches by different councils. Interestingly however, an interviewee from DEPI suggests the creation of a regional animal management officer, in doing so relying on uniform local laws applying across neighbouring councils:

“It seems to me that in a council all those animal management officers should be able to work right across [other neighbouring councils]... But they’re all contiguous, so why don’t they just have all the same laws?... Save a lot of money. They have a central pound facility. It would be really worthwhile. They might be able to get a better price, all that sort of cooperative behaviour. We might say that’s where the dog parks are going to be... the [Domestic Animals] Act could be changed to say those officers can act anywhere... So you’ve got instead of officers here just... doing four to five functions. They could do the one function over the entire area and become professional animal management officers, a bit like an RSPCA officer⁸ ranging over the whole state.” – DEPI

Such an initiative would arguably benefit both councils and communities across metropolitan Melbourne as the animal management officers in this new model would be experienced and dedicated professionals, able to action incidents across a large catchment. Dogs and dog owners too would arguably benefit from having uniform laws applying to them irrespective of which council they lived in, experiencing consistent regulations between councils. The DAA restricts such uniformity and would require structural reform before this idea could take shape.

Effective control, responsible dog ownership and an outcomes ontology

Finding 6: The *Domestic Animals Act 1994* (Vic.) and local laws at councils introduce the unclear concept of ‘effective control’ that is extremely difficult to interpret and enforce in a consistent way. Effective control is an important principle that is referred to in the Act however it is left to councils to specify how that concept is defined for their communities through their various local laws. This leads to a variety of interpretations and expectations of councils and in the community in regards to both the definition and enforcement of effective control. That effective control is rarely enforced in its own right contributes to a disparity in expectations between council and community that potentially impacts the broader perception of dogs in the community. Furthermore, that effective control is rarely enforced in practice leads to questioning whether it belongs in legislation in the first place.

⁸ An RSPCA officer is an officer of the Royal Society for the Prevention of Cruelty to Animals that is approved as a general inspector by the Victorian Minister responsible for the *Prevention of Cruelty to Animals Act 1986* (Vic.) (‘POCTAA’) under section 18 of POCTAA. The RSPCA officer is responsible for administering POCTAA which differs in both purpose and content from the DAA.

I argue that more uniform regulations across councils would simplify the role of animal management across councils and clarify community expectations as to how dogs are managed. In addition to the disparity introduced by different council regulations, inconsistency emerges from different interpretations of vague and subjective concepts introduced in the DAA. Such inconsistency leads to different outcomes for dogs, where the rights of individual dogs differ based on individual interpretation.

The concept of ‘effective control’ is introduced in the DAA and relates to the owner’s control over their dog; the term is however never explicitly defined. Effective control is a fundamental principle of responsible dog ownership, contributing to community harmony and the avoidance of serious grievances such as dog at-large, dog attack, rushing, menacing, and the like; many of these downstream incidents can be attributed to an owner lacking effective control of their dog. The lack of enforceability of effective control regulations in and of themselves fosters an inconsistency of expectations between council and community, in turn impairing the community perception of dogs. The following accounts illustrate the lack of enforceability of effective control regulations:

“Effective control is one of those contentious issues where you might book somebody for having their dog off-lead in an off-leash area and they’ll still struggle to understand why they’ve received an infringement notice [for not having effective control of their dog].” – AMO 7

“So even if a dog’s on lead, that’s not necessarily under effective control. When you’ve got the leads that can extend out by 10 metres or something like that, it being on lead doesn’t necessarily make it under effective control because if they can jump all over someone, or be allowed to do things which are disturbing other people, disturbing other animals, despite being on a lead, it’s not really under effective control. And that’s one of the challenges in a compliance area with dog issues is managing people’s expectations about what effective control is as well.” – AMO 17

“The dog doesn’t know that... the person certainly doesn’t control the dog to do it. We often have people who walk their dogs off-leash up the street...” – AMO 8

These remarks position effective control loosely on a spectrum. Some in the community believe that any dog can use an off-leash park regardless of a state of control and some believe it safe to walk a dog off-leash in the broader public realm on the self-assessment that their dog is well-behaved or harmless. Some in council too acknowledge that ‘dogs will be dogs’ so have a comparatively more animal-oriented

definition of ‘effective control’ that accounts for instinctive behaviour. Councils themselves contribute to this confusion, with one council in my sample using the term ‘free roam’ interchangeably with ‘off-leash’, with the term ‘free roam’ creating a sense that effective control may not be required. Effective control is more an interpretive art than a deductive science.

AMO 17 distils the difficulties in defining and enforcing effective control as “managing people’s expectations about what effective control is”. The following accounts illustrate that whereas councils understand that enforcing effective control is very difficult if not impossible, the community may not have the same understanding:

“But effective control means immediate recall and response and also carrying a lead, so you can bring your dog under effective control by... I can guarantee that probably I don’t know seven or eight people out of 10 haven’t got effective control of their dogs. They don’t get it.” – AMO 5

“Effective control is very hard... The only thing I would accept if an owner says ‘Fido, here’ and the dog doesn’t hesitate and the dog’s here: that’s effective control. But if Fido... but if you’re the owner yelling ‘Fido, get here now’ [and nothing happens]... that’s not effective control.” – AMO 3

“But the dog in question, when they’re there still, has to be under effective control whether it’s by voice control and so forth. And if there’s an issue and the dog doesn’t recall, then the dog is not under effective control therefore an offence is being committed. Policing that sort of activity is nigh-on impossible due to the resources and the timeframes when this is occurring and so forth.” – AMO 2

“If your dog is attacked and not having effective control of it, obviously if it’s a serious attack we’ll go straight to a charge sheet and we’ll charge a person for not having effective control of their dog. And, obviously, that’s a laugh because we get questions like: ‘it’s an off-leash area... why, I’m allowed to have my dog off-leash, therefore it’s allowed to be not under effective control!’” – AMO 7

“People are supposed to only let their dogs off the lead in off-leash areas if they can be under effective control. The reality of that is that dogs are still dogs and something can distract them. Even the best trained dog can get distracted; it might get chased by another dog. A whole bunch of things can occur that upset the dog. And so we... while we look at... when we do patrols, looking at not under effective control, that sort of comes through when problems occur, like dog attacks, where it becomes sort of obvious where in some cases perhaps neither party had control over their dog and we will deal with both of them.” – AMO 17

These accounts show a spectrum of council expectations of effective control in practice, ranging from instant recall to recognising innate instinctive behaviour of dogs. Some of these accounts identify effective control as indirectly enforced through the occurrence

of some other event that is more objective, such as dog attack. That is, a lack of effective control may be a root cause of another incident, but in and of itself is not usually directly enforced. This begs a question: is it the lack of explicit definition that causes difficulty enforcing effective control, or is it the lack of direct enforcement of effective control that reduces a need to define effective control more precisely?

If the lack of definition reduces the practical ability to enforce effective control, which on balance animal management officers might agree is the case, then a more robust, uniform definition may make effective control simpler to enforce in practice. Furthermore, a uniform definition of effective control would make it easier for both DEPI and the councils to communicate to the community what effective control means and why it is important, reducing the range of expectations in the community and aligning those expectations with that of DEPI and the councils, reducing conflict. Consequently, the perception of dogs in the broader public realm ought to improve as a result of more dog owners practicing effective control. There nevertheless appears no clear consensus of what that precise definition of effective control is and how effective control ought to be enforced in practice.

This apparent impasse resolves by acknowledging effective control as a normative statement, similar to responsible dog ownership. Effective control yields a range of different opinions in the community, a range of expectations as to what it means and where it applies; asking a similar question of ‘what’s responsible dog ownership?’ will similarly yield a range of answers. Lacking effective control and responsible dog ownership may contribute to downstream incidents which are themselves enforced but lack direct enforceability in practice.

In a normative sense, effective control contributes to the welfare of dogs and improves the perception of dogs in the community. However I argue that, similar to responsible dog ownership, effective control is primarily educational in nature and both structurally and ontologically different from a typical compliance-based object. In other words, I argue that effective control is outcomes- rather than process-driven. Viewed through this lens, it becomes understandable why enforcing effective control through a legislative approach does not work in practice for councils and that adopting an educational approach in both the DAA and council local laws is more appropriate.

Recommendation 4: Effective control is situated in the *Domestic Animals Act 1994* (Vic.) and therefore it must be able to be complied with and ultimately enforceable. Effective control is aligned with an educational rather than compliance-based approach and therefore its inclusion in the Act and local laws should reflect an educational rather than compliance approach.

If a provision is in an Act and that provision describes an offence, then that provision should arguably be enforceable. The concept of effective control is nebulous such that practical enforcement of effective control is difficult or impossible to consistently undertake in practice. Furthermore, in practice where effective control is lacking and a related offence takes place, it is this offence that is prosecuted, e.g. dog attack, rushing, menacing and dog at-large, rather than the offence of lacking effective control.

In contrast to offences under an Act, the DAA treats responsible dog ownership as an educational function of animal management by encouraging councils and DEPI to promote the virtues of responsible dog ownership and by using responsible dog ownership training courses as possible remedies. Similar to effective control, if responsible dog ownership is lacking, it can contribute to a downstream offence such as dog attack, rushing, menacing and dog at-large. Under the DAA and the various local laws of councils, simply being an irresponsible dog owner itself is not an offence; rather, irresponsible dog ownership can contribute to the likelihood or severity of a downstream offence under the DAA, the POCTAA or various local laws.

I have argued that effective control is no different in nature to responsible dog ownership and, as such, ought to be treated as an educational rather than compliance-based object. The existence of laws describing an offence establishes some expectation in the community that they will be enforced. By the council failing to enforce that law in practice, the broader community expectations of council are not satisfied and, accompanying that, the perception of dogs and dog owners more broadly may be detrimentally affected by the council's apparent failure to act.

It might be argued that without effective control as an offence, control of dogs in the community's public open spaces might be jeopardised. However since effective control is at present never really enforced in its own right, the power of this argument is substantially diluted. If lacking effective control was removed as an offence under the DAA and various local laws, I argue that this would more accurately reflect what is

enforceable, thereby better aligning the expectations of council and the community and encouraging harmony.

Barking dogs and a process ontology

Finding 7: The *Domestic Animals Act 1994* (Vic.) introduces a number of unclear concepts that are extremely difficult to interpret in a consistent way. A barking dog is an offence under section 32 of the Act when it is deemed to cause a ‘nuisance’ to humans. What comprises a nuisance subjectively varies based on any number of individual and environmental parameters. Curiously however, councils appear to have far more success in enforcing a barking dog complaint than enforcing effective control despite what appear similarly vague definitions that rely on an essentially interpretative enforcement process. I argue that a focus on a consistent enforcement process rather than outcomes is what appears to differentiate the success of barking dogs to the lack of success of effective control. This consistency in process helps to better align council and community expectations, thereby improving the perception of dogs in the community.

Barking dogs are one of the most common complaints made to councils. From a human perspective, such complaints are highly subjective and dependent on hearsay evidence and accounts which often directly contradict one another. From a canine perspective, the incidence and duration of barking is a by-product of environmental conditions and an individual dog’s own tendencies and personality such that any effective solution or treatment for barking needs to be tailored to the nuances and needs of a particular dog in a particular environment. The following interviewees poignantly illustrate these issues:

“Well, of course not, dogs bark, that’s what they do. So if you’re at home and you work at home and your neighbour has a dog, well you’re going to hear that dog bark because you’re at home. During the day if you’re at work, and you’re not at home and that dog barks, you’re not going to hear it. So, you might hear that dog bark 10 minutes for eight hours, but all of a sudden you’re at home and you hear that dog bark 10 minutes over an eight hour period, does that mean that dog’s a nuisance? No, it’s not... How do you say to that person who’s becoming somewhat disgruntled that, ‘Well, no, the dog’s not becoming a nuisance only because it barks’. Because dogs bark, that’s what they’ll do. They bark because they’re excited, they bark because there’s a bird in the backyard, they’ll bark because they’re trying to tell you they’re hungry, they’ll bark because they want to go for a walk. It depends on the dog of course but... they’ll bark for a whole lot of reasons. It’s trying to establish why the dog’s barking. But a dog’s barking just because it’s a beautiful day and it’s barking off its tree you know for 40 minutes in an hour... Well hang on a minute, the red flag might go off and say there’s an issue... In regards to barking dogs it depends... trying to appease somebody by saying, ‘Hang on a minute. A dog is a dog... you can’t expect a dog to be quiet 24/7. It’s an unrealistic expectation.’” – AMO 7

“We unfortunately see too often dogs that are not exercised, they’re not socialised, they’re not looked after in any way, shape or form and therefore we have the fallout from that. And that’s unfortunately where we get involved, and we see that far too often, particularly in this municipality where the block sizes are becoming quite small and the backyard will be as big as this room... There’s noise issues with the dogs being bored, having no enrichment whatsoever, and the flow-on is the barking problem, the howling dog issue, the dogs fighting amongst themselves when they’re fed and, like I said, unfortunately we see that far too often.” – AMO 2

“One of the issues is that aspect that with noise, any sort of noise issue, there’s a real psychological aspect to it with that sensitivity of the complainant to the noise and it’s very hard to undo someone’s sensitivity to a noise that’s developed: ‘If that little dog next door barks once again, it’s going to drive me crazy and I’m going to be pulling my hair out’.” – AMO 17

These accounts demonstrate the subjectivity of barking dog complaints. A curious aspect to barking dog complaints that distinguishes them from most other complaints is that the owner is commonly not present when the alleged barking offences take place. This information asymmetry of the complainant and the dog owner exacerbates any pre-existing conflict, creating an additional burden for the council to achieve an amicable resolution of the complaint. Even if neighbours and council can agree that a problem exists, barking dog complaints remain both messy and potentially time-consuming to resolve, requiring resources and commitment from all parties:

“Rather than getting council to intervene right from the point where they had the initial problem that which then by the time it gets to six months, you have a solution because barking dogs by no means is something you can solve... We intervene, and we’ve still got to do the investigation processes. So the obligation is to raise the issue with council prior to it becoming a big issue.” – AMO 7

“The majority of barking complaints will resolve quite quickly once council gets involved. Most owners don’t realise their dog’s a problem. As soon as they’re told, they will take appropriate measures to deal with it. From that, a small portion will continue on for whatever reason: the dog’s more difficult to manage, more training’s needed, or the owner just isn’t doing the things that need to be done.” – AMO 17

As such, when a complaint is finally lodged with council, the complainant might then become frustrated as investigations can take time and action cannot be instantly taken against the accused dog owner. AMO 7 introduces a paradox inherent to barking dog complaints: that to avoid conflict in the community, the onus is on the complainant to raise the complaint with council before it becomes an issue. In most circumstances, this is likely an unreasonable expectation held by council for the community to be able to

identify that the severity of a problem is escalating before they have collected evidence that it has escalated.

The complainant and the dog owner may differ in both fact and perception, these contributing to the localised conflict between neighbours and, by extension, council. Section 32 of the DAA describes barking dogs as an offence once they cause ‘nuisance’ to any person, where nuisance is a detrimental impact on amenity in terms of ‘peace, comfort or convenience’. There is no simple rule which applies in all circumstances:

“Nuisance can be one bark a day. And I use that as the extreme case but it would be very difficult to prove that. The wording of a nuisance [in the DAA] is how it impacts adversely on your life. It’s not how often it barks, it’s not when it barks: It’s what that bark does to affect your life.” – AMO 8

“So one of the issues with any barking complaint, you get people just not satisfied that... any noise complaint, people will get to a point where they actually become unreasonable about it... Because dogs are allowed to bark – they’re just not allowed to bark ’til they’re a nuisance; and what constitutes a nuisance obviously depends on the time of day, frequency, volume, duration, all of those things. So it’s not black-and-white, but people become very sensitive to the noise of the particular barking dog. The dog might bark twice a day and they will insist that it’s a nuisance.” – AMO 17

The concept of ‘nuisance’ in practice bears some similarity to the concept of ‘effective control’, both embedded in perception and lacking broad consensus. Most interestingly however, whilst animal management officers tend to speak in terms of the outcome of (lacking) effective control, they more commonly speak in terms of process in relation to barking dog complaints, as in these examples:

“What’s the interpretation? Some people think a dog going ‘woof, woof’ is a nuisance... [The] barking dog process is not very easy. It can be long and protracted because you go back to Court and get notices... abatement notices... and then the owner of the dog’s got to demonstrate that they’ve abated the barking. And then if they don’t, you’ve got to go back to Court. But all the way through, the dog might be barking all the time, but there’s nothing we can do about that. Like I said, we can’t just go in and take the dog off the property. The outcome is that the dog can’t be removed, so they can keep the dog there but you know we keep going back to Court... it can be long and protracted.” – AMO 5

“There’s still a very large problem but having changed process, we’re able to deal with them in a much more timely manner because we were just taking too long to resolve these jobs.” – AMO 17

Along with the ‘investigation processes’ of AMO 7 earlier, these accounts demonstrate a central importance of process to resolving barking dog complaints.

In introducing regulatory challenges earlier in this section, I established the importance of the ontological alignment of the approach to method of treatment or remedy using the example of ‘effective control’. In that argument, I demonstrated that effective control was not well-aligned with a compliance-based legislative approach. In contrast, the process-driven approach to managing barking dog complaints is suited to a compliance-based legislative approach despite the lack of a single definition of ‘nuisance’. That is to say, the lack of a definition of ‘nuisance’ in the DAA does not appear to reduce the efficacy of barking dog enforcement; rather it is the ontological alignment of the compliance-based, legislative approach to the process-based management activity that makes the enforcement of barking dogs much more common and effective than similar attempts to enforce effective control.

In having a process-based management activity to addressing barking dog nuisance, there is a transparency in decision-making that apparently settles the community. Whereas individuals might not agree with the outcome of the process, collectively the process is agreed between both council and the community and in this case is underpinned by legislation (the utilitarian nature of a process focus from earlier). This agreement on process, setting aside the plurality of possible outcomes, creates a degree of commonality in expectation across both council and community. Moreover, this agreement in expectations reduces conflict and, I argue, over time improves the perception of dogs in the community.

10.3 Education challenges

Education activities are undertaken by both DEPI and councils in their respective animal management roles. Education can be targeted towards current dog owners, future dog owners and the wider community. Integral to both roles is education around responsible pet ownership, the importance of these education programs for the owner, the dog and the community being underscored by this animal management officer:

“When you’ve got uneducated dog owners and uneducated public mingling together, it’s a recipe for disaster. And it’s a disaster not only for the people that might be bitten or not enjoy their time in that reserve, it’s a disaster for the dog because it becomes anxious, creates anxiety itself. But it then is open to being destroyed because it’s done the wrong thing because of bad management...

...You know cartoons, radio shows, always said your dogs have got to be registered, and I just couldn't understand [why they were necessary]. Then I sat back and think, 'Well, I'm in the field. I know what's going on. I'm constantly exposed to it. I understand these things. It's not an issue to a lot of the community.'" – AMO 8

Regulatory compliance is arguably not at the forefront of many owners' minds when they take ownership of a dog. Animal management officers typically undertake their education role through a variety of means including newsletters, websites, fixed and temporary signage, informal discussions with dog owners, and formally through the enforcement of regulations. The dog owning community also regulates its own behaviours through informal, owner-to-owner education to preserve the amenity for them and their dogs which they enjoy. These behaviours relate to a strong sense of community ownership (also see Chapter 11).

Despite these efforts, some people will never consider complying with regulations regardless of what activities councils or DEPI undertake:

"People are generally law abiding people we deal with. 80% of our issues are with 5% of the population. Most people do the right thing; that 5% will not change irrespective, although I always have issues with them." – AMO 2

Being a diligent and responsible owner does not immediately confer an interest in understanding local regulations. As a common example, the size of the dog exclusion zone around children's playgrounds in public open space varies greatly between councils; these differences appear to lack reason, making community education more challenging. Knowledge of the technical details however is perhaps of lesser importance than an understanding of the reasons why it is important to comply in spirit:

"We rely on the rest of the public to be the observers, you know. People are more likely to do the right thing if there's other people around watching them. And we also rely on people's own understanding of the reasons why it's a good thing to be compliant." – AMO 9

This argument derides the plurality of technical differences in regulations between councils, such as with the size of dog exclusion zones, as being different for difference's sake; the animal management officer's task of education then becomes very difficult in practice.

Whereas education and compliance programs run by councils tend to focus on responsible dog ownership, education programs run by DEPI focus on the broader

community. Community education focuses on state-level priority areas of safety around dogs and the broader remit of animal welfare. According to DEPI, community education is important given that dog owners often cannot ‘read’ their own dog:

“It’s trying to empower children and the family and the reason we do that is that people are notoriously poor at judging their own pet... So it’s a bit of almost not relying on the owner... It’s not so much that they’re irresponsible, but they cannot read and cannot believe that their own dog is a dog.” – DEPI

This lack of comprehension endangers the broader community which may receive mixed signals regarding safety.

The remainder of this section reviews education by looking at what kinds of education programs councils and DEPI provide dog owners and the broader community and how these programs link into broader animal management roles and governance.

Education, responsible dog ownership and compliance

Education provided by councils usually relates to compliance, leading to a broad focus on responsible pet ownership. The depth and breadth of education programs offered by councils vary quite substantially, as illustrated:

“One of my officers has the education portfolio. That involves speaking to children’s groups, going to our *** safety village when there’s holiday programs. Just on Saturday, we had a Pets in Parks activity where two of my local laws officers with handouts, give-outs, education requirements, speaking with people, interacting with people and their dogs.” – AMO 2

“I do a lot of education out there and I go to a lot of schools and teach responsible pet ownership to the kids and parents... I just find in the parks it’s good, but I want people to be aware of their animal’s behaviour... I think ***’s is now proactive and doing a lot more education stuff where before... you come up with your dog and you ask me questions.” – AMO 3

“We’ve turned our time around. We were pretty much 100% reactive work recently. We’ve done a service plan; we’re going to try... We’ve promised council that we’re going to try and have 75% of our officer resources put onto more proactive work and that might include doing some after-hours work, weekend work, maybe going out to some of the reserves where people say there’s no enforcement and actually seeing people in the park. They can see council officers saying, ‘Mate, you really should have your dog on-leash here. Can we just ask you to do that?’ and start to educate the community that council is out there, you know, giving people directions about what they should be doing.” – AMO 21

The approaches of councils clearly vary in both scope and intensity. Often however, the council's education activities are coupled with enforcement activities as part of an escalation scale. In this sense, the education component is used both as a deterrent and for council to be seen to make best efforts to help an individual comply should an infringement be issued:

"There is an enforcement program or matrix in place where, you know, if a dog is off-leash, you won't receive an infringement but you will receive an official warning to start with. And when you get caught again – and when I say 'you', I refer to the dog, so the warning goes against the animal – and if that animal is caught again off-leash then that animal will receive an infringement notice. So it's like a two-tier, you get a warning to start with, then you get an infringement notice." – AMO 7

"It's an education thing; it's to encourage people to do the right thing. Because if you don't then the enforcement side kicks in so you get the penalties." – AMO 5

"...because part of the education is informing them of the rules and regulations of the dog, then liaising, then you assess, then you enforce." – AMO 3

"A lot of compliance-enforcement is about education... so good compliance-enforcement is about trying to tell people because a lot of people actually don't know. We assume everyone just knows what we know but a lot of people out there go and buy a family pet and often they don't know a lot of things." – AMO 21

"We have an Ask-Tell-Enforcement policy." – AMO 8

Councils however need to both plan and implement their animal management education programs to be effective. The educational activities of councils are generally constructed around the state-level priorities and described within the DAMP, this focus leading to difficulties in gaining practical traction and financial commitment from councils; see the earlier discussion and recommendations in section 10.1. Adopting these recommendations ought to improve the commitment which councils give to education and promotion activities, thereby improving the compliance education programs offered to dog owners. Improving knowledge of regulations in the community ought to improve compliance and, in turn, improve safety around dogs in the community with more knowledgeable, responsible owners.

Education, community and safety

Finding 8: With ever-increasing population densities in urban areas, humans will encounter an increasing number of dogs in public open space and the broader public realm, and encounter dogs more often than in the past. Community education on safety around dogs therefore plays an increasingly important role. Aside from a suite of school programs, DEPI does not run safety programs for the broader community; rather, DEPI instead relies on councils to implement their compliance education programs in order to manage the risk of dog bite posed to the broader community. I argue that this risk to the community of dog bite is presently inadequately managed by DEPI and that both the councils and DEPI need to work together to develop broader community education programs that better address the safety issues around dogs.

Community education is generally targeted by age group. Along with their parents and grandparents, children are educated on safety around dogs from an early age, in particular the avoidance of dog bite, through the pre-school and primary school education programs run by DEPI and supplemented by arbitrary programs run by some councils. DEPI offers new parents educational programs through ante-natal centres on how to best introduce a new baby to a household with a dog. In addition to these safety programs, DEPI provides information in relation to responsible dog ownership targeting both current and prospective dog owners.

According to interviewees from DEPI, community education programs are expensive and they generally invest in a particular program for a given species exclusively for a set period of time. Programs designed to change community behaviours of responsible pet ownership are especially prohibitive in their cost, both in terms of research necessary to design the program and in implementation. Furthermore, evaluating the success of behavioural education programs is complicated by the long lead-time between investment and measurable outcomes, adding substantial risk to government commitment as the timeframe for investment is long and the payoff is uncertain; dogs are highly sensitive to politics of the day (also see the earlier discussion in section 10.1).

Programs to educate the community on safety around dogs have perhaps more tangible benefits according for DEPI, e.g. a measurable reduction in the incidence of dog attacks and dog bites, and thus carry less exposure to risk posed by politics. DEPI runs programs for children and youth through schools and kindergartens which focus on dog bite prevention both at home and in the community. These programs importantly centre on the needs of the dog in order to understand how the dog might react to different

stimuli and provocation. There is also some information provided about how to responsibly care for a pet which supplements the responsible pet ownership education provided by councils:

“The core message it’s probably fair to say is when not to disturb a dog, so when it’s eating or when it’s sleeping. For parents, it’s ‘supervise or separate’. That’s without a doubt the core message. But we try and complement that with responsible pet ownership to the level that the child or group can cope with.” – DEPI

DEPI typically targets children, parents and grandparents through their community education programs on safety around dogs. Due to inadequate resources to operate broader community education programs, DEPI relies on regulations enshrined in the DAA and council local laws to protect the broader community:

“We just don’t have the resources. It costs a humungous amount of money to run a public education program.” – DEPI

As an apparently unintended consequence of this lack of state-level resourcing, the education and compliance programs run by councils which educate dog owners on regulations are burdened with the added responsibility of reducing the exposure of the broader community to the risk of dog bite:

“And so the idea with the children is whenever you go near any dog, you must ask the owner. It should be on a leash, so trying to get kids to do it that way. And then there’s the parent education. And then there’s the general community controls which is about... So those controls are aimed at managing dogs in a home situation, not necessarily in the family home but in a home situation... and then the wider community controls are around dogs being on leads, dogs not wandering at large, that a legislative requirement...” – DEPI

This remark is predicated on effective community education and awareness of these ‘home situation controls’ and ‘wider community controls’. Councils however do not consistently or adequately fund commitments in their DAMPs so council-run education programs are at risk of never taking place (see section 10.1). DEPI is by extension mitigating the need to educate the broader community on safety around dogs by relying on councils to consistently carry out their educational, compliance and enforcement role. This risk management control is largely ineffective however, with councils appearing unaware of the additional burden DEPI is placing on them and furthermore, in many cases failing to fully implement their education and compliance programs which places the broader community at greater risk of dog bite.

Importantly, the responsibility for managing the risk posed by dogs to the broader community appears to lie with DEPI and not with councils. Despite the unfortunate omission by some councils to fully implement their education and compliance programs in relation to responsible dog ownership, it should not be a council's sole responsibility that the downstream impact of that failure then results in a wholly unmitigated increase in risk of dog bite for the broader community. DEPI's lack of a broader community education program into safety around dogs contributes heavily to this overall risk management failure.

If the recommendations from section 10.1 are implemented, the DAMP will arguably become more relevant to councils and thus more attractive for councils to commit funds to and implement their planned education and compliance initiatives. This in turn ought to substantially reduce the risk of dog bite to the broader community by having more educated and responsible owners. It remains for DEPI to commit to educating the broader community on safety around dogs, further alleviating the risk of dog bite currently presented to the community.

Education, dogs and animal welfare

Finding 9: In most circumstances, the education and advice provided by major animal welfare organisations ought to be strongly aligned with the message DEPI would like to communicate. However, animal welfare organisations (particularly those with their own shelters) potentially experience a conflict of interest when providing prospective dog owners with educational advice on appropriateness of a particular breed or dog for an individual's lifestyle since they would like to re-home as many animals as they can. DEPI is in a more objective position to provide such advice and a community education program could communicate such advice to the broader community.

Community education and advice on appropriate breed selection for lifestyle is increasingly important as the urban environment becomes more dense, with smaller houses and fewer opportunities available for access to both private and public open space. The importance of this knowledge to the efficacy of animal management in the community is shared by these interviewees:

“The Border Collie's a working dog and needs the running and, unfortunately, we're finding a lot of those working-type dogs on very small parcels of land and that creates a problem in itself.” – AMO 2

“They purchase the appropriate breed. They research the breed to make sure it suits their lifestyle and their environment... you could keep big dogs in apartments, there’s no problems with that... You don’t have to have a great big property for a great big dog: that’s just fallacy, that’s not true. You know, a lot of people misunderstand that you should have a big backyard.” – AMO 5

“People just don’t think. They get the breed they want, not the one that meets their environmental needs.” – AMO 8

“So while there’s been some work certainly by the Department of Environment and Primary Industries on educating people about what breed is right for them, selecting the right dog, if that actually had any impact we wouldn’t be seeing Kelpies in residential areas.” – AMO 17

These interviewees from a broad cross-section of councils identify a role for community education on appropriate breed selection for lifestyle, in particular to address the trend of traditional working dogs often being inappropriately owned as pets in urban environments. Major animal welfare organisations however dominate the community education space on animal welfare issues according to DEPI and feedback from some councils; in the words of AMO 2, “it’s the brand”. In the following remarks, DEPI acknowledges that this external push diminishes their education role:

“We would see that if you hear or read anything about a dog, our aim would be that the spokesperson on dog and cat issues would be someone from the Bureau but the reality is the media would prefer to hear what Hugh Wirth [Director of the RSPCA, Victoria] thinks about that. And that’s the RSPCA’s view, it’s not a State of Victoria [view], balanced on policy and balanced on education and things like that, that’s Hugh Wirth’s opinion... So there’s a reality there, and that was one of the reasons for setting up the pet care practices campaign was to start to position the Bureau as the lead agency.” – DEPI

“They [the community] don’t come to us for help, unless they’re in legal trouble. They go to those [animal welfare] organisations for free assistance or assistance with advice on pets because I don’t think government is the most trusted source.” – DEPI

In most circumstances, advice from animal welfare organisations ought to be broadly in accord with DEPI’s message. This begs the question as to why DEPI wants to be the trusted source for information on animal welfare issues, since the external animal welfare organisations already communicate an appropriate message effectively and that DEPI’s community education capability suffers from a constrained budget.

On the one hand, DEPI might simply desire control of the animal welfare education message; whether this would alter the overall content of the current message

substantially enough to warrant this change in control is uncertain. Another, perhaps more compelling reason is to manage an inherent conflict of interest which animal welfare organisations might face by encouraging community adoption of stray animals from (their) shelters; with the objective of rehoming the animal as soon as possible, the animal welfare organisation risks failing to sufficiently assess the suitability of the animal to the lifestyle of the prospective owner. This leads to downstream problems of irresponsible pet ownership in the community:

“And this public attitude which is multiplied by the shelters trying to rehouse all of these animals is: ‘Everyone should have a dog, they’re wonderful’. But the general public find once they get them, that it’s not quite so wonderful as they think. They crap everywhere, they fight, they bark, they rip up the carpet, they’re expensive to responsibly own. And so the essence of the problem is somewhere in there where you have to be prepared to own these animals and look after them. And they don’t and that’s why we have stray dog problems, failure to register, barking, misidentification, no identification...” – DEPI

Some animal welfare organisations do have a vetting procedure; for example, Victorian Animal Aid’s ‘meet your match’ program offers such a program to match potential adoptees with shelter animals, substantially reducing any real or perceived conflict of interest (Victorian Animal Aid 2009). Nevertheless, not all organisations offer such programs and so there remains a potential role for DEPI to provide impartial advice to potential owners on appropriate selection of breed for lifestyle, mitigating downstream consequences of irresponsible ownership arising from inappropriate ownership decisions.

Investing in community education

Recommendation 5: In order to address the risk of dog bite, I recommend that DEPI develops a community education program that addresses the broader community, both dog owners and non-dog owners, on issues of how to appropriately behave when encountering dogs in public open space and the broader public realm. Supplementing this program, in order to address the problem of inappropriate breed selection, I recommend that DEPI develops a community education program for prospective dog owners to encourage appropriate breed selection for lifestyle. These programs should reduce the risk of dog bite and other nuisance in the community with more responsible dog ownership and greater awareness in the community of how to act around dogs safely. In turn, the perception of dogs more generally ought to improve, leading to better access to opportunities for amenity for dogs.

Community education programs run by DEPI target children, youth, parents and guardians on safety around dogs and dog ownership. Council-run education, when it takes place, usually focuses on educating dog owners and other directly affected community members on compliance matters. The education programs which target dog bite prevention in the community are considered essential and according to DEPI, in respect of children, the incidence of dog bite has reduced over the years as a result of these programs:

“So that improves the reputation of dogs because less dogs attack and we actually see that in the Monash Accident Research Centre figures for certain. Our target group is the very young children who are being attacked and put into hospital. So we’ve been trying for about 10 years to change the behaviour of parents and supervisors and the figures are sort of going up like that with more dogs and people in the community, but the figures for that group are diverging away, downwards on the graph, which we feel is the success of the message. But that’s only for the target group; we just don’t have the resources [to target other groups].” – DEPI

The efforts DEPI makes in its education in schools program achieves its core objective of reducing the incidence of dog bite in young children. On that basis, I recommend that the current dog bite prevention programs offered by DEPI through kindergartens and schools be expanded in scope to become a dog safety education program for the broader community. I argue that such a program would reduce the reliance DEPI places on council-run education and compliance programs and better manage and mitigate the risk of dog bite in the community. Expanding the scope of the educational work of DEPI appears warranted based on this remark from an animal management officer:

“Now in the DAMP it says I want to reduce dog attacks. Now my ability to reduce dog attacks, I believe is through community education... it’s not through enforcement.” – AMO 8

In conjunction with the safety around dogs education program, I encourage DEPI to increase community awareness on appropriate breed selection for lifestyle. DEPI notes at present that major animal welfare organisations dominate this space and, although the messages are similar in content and intention to what DEPI would have done, DEPI can better help people choose the right pet for their lifestyle, particularly if it is rehomed from a shelter. Improving community awareness of appropriate breed selection may mitigate downstream nuisances and transgressions caused by irresponsible dog ownership.

Reducing the incidence of dog bite and nuisance caused by dogs in the community, perception of dogs ought to improve both amongst dog owners and non-dog owners. In Chapter 11, I argue that this ought to allow councils political freedom to increase the amenity for dogs in the community. That is, improving community education around dog bite and breed selection should lead to both a safer community and a community where dogs have more rights and freedoms.

10.4 From management of dogs to planning for dogs

The management of dogs is complicated by the influence of Victorian government requirements through the DAMP. The DAMP is essentially a hybrid document which reflects in part both local and state priorities, this disconnect causing the DAMP to largely reflect state-level priorities which may be less relevant to the local community. The plans consequently suffer from a lack of financial commitment from council to funding actions in the plan since the actions mapped over the plan’s four year horizon likely lack direct relevance to that council’s own problems and priorities.

The regulation of dogs appears particularly problematic for councils. In terms of enforcement, the DAA is particularly focused on the more severe offences such as dog attacks and dangerous dog protections. Councils are for the most part at liberty to regulate dogs in the community in any (reasonable) way they see fit, leading to substantial differentiation in regulations between councils and confusion in the community.

Examining the enforcement of regulations through a critical ontological lens provides some insight into why the enforcement of some regulations is more effective than others. Effective control, being essentially an outcomes-focussed, educational phenomenon, is difficult to enforce in practice since the enforcement approach is process-driven. On the other hand, the enforcement of barking dog offences, being a compliance-based phenomenon that is heavily embedded in process, has far more success.

Through examining the governance of animal management, a theme emerges whereby the Victorian government and councils are unclear about what each is responsible for, this situation leading to overlap in some areas of concern and gaps in other areas which ought to be of concern. Community education programs appear particularly vulnerable, with the Victorian government implicitly relying on council-run education and compliance activities to mitigate the risks of dog bite in the community. The council-run activities may not always take place, exposing the community to a heightened risk of dog bite.

The involvement of the Victorian government in animal welfare education could improve the impartiality of advice on responsible dog ownership for prospective dog owners in particular. Animal welfare organisations, particularly those which operate shelters, are susceptible to moral hazard in providing advice on adoption of stray animals to potentially inappropriate prospective dog owners.

This chapter has shown that animal management is a complex responsibility of councils and the Victorian government, and that animal management practices do impact the welfare of dogs and the stake which dogs have in the community. In continuing this discussion, the forthcoming chapters turn to how planning for dogs takes shape, including an understanding of what stake dogs have in society and how this affects the attentions of planners, both in terms of what they plan and how that planning is done. Together, these chapters provide an understanding of both how animals are currently managed and planned for in the urban environment of Melbourne.

11. PLANNING URBAN AMENITY FOR DOGS

Following on from Chapter 10 which described how animal management affects the welfare of dogs and their stake in the community, over the forthcoming chapters I turn to explore how open space planning and urban planning affect the lives of dogs in urban environments. Whereas dogs have cohabited our private homes and spaces for centuries, over time they have increasingly been permitted to cohabit public space, perhaps begrudgingly but nevertheless a staple participant in the modern urban milieu (Howell 2015, ch.6). A need to consider the planning of urban amenity for dogs consequently emerges from these historical trends. The chapter begins by understanding where planners see the place of dogs in society. The stake of dogs in society arguably drives the attentions which open space planners and urban planners provide dogs. Together, this chapter and those forthcoming systematically review the amenity for dogs and how that amenity is planned for and created in practice.

11.1 Dogs and the community

This section⁹ examines the question of why amenity is provided for dogs. According to the *Concise Oxford Dictionary* (1995), ‘amenity’ is “a pleasant or useful feature” or simply “pleasantness”. Providing amenity for dogs is to provide them with things that give them pleasure, that stimulate them and satisfy their needs. Earlier in Chapter 6, public open space was identified as an urban construct of fundamental importance for dogs, providing the opportunity for dogs to function in play and affiliate with other dogs and species, helping them achieve their potential capabilities. This section examines the question of why amenity ought to be provided for dogs in the community.

The legitimacy of dogs in the community

Dog-walking is one of the most popular uses of public open space across many municipalities throughout Melbourne. In Bayside, dog-walking ranks third below general recreational walking and appreciation of the natural environment, however notably ahead of other intensive uses like formal or informal sports (Bayside City Council 2010, pp.87-8). In Port Phillip, general walking and dog-walking are deemed the most popular activity in public open space (City of Port Phillip 2009a, p.23). During interview, the Frankston OSP similarly remarked of dog-walking:

⁹ Note: The contents of this section have been adapted and published in Carter, Day and Fryd (2015).

“It’s the most popular activity I would say for using open space. Dog-walking would be up there as one of the highest recreational uses of open space.” – Frankston OSP

This shared use activity of dogs walking with their owners in public open space demonstrates a legitimate need for basic consideration of dog owners and dogs when considering investment in amenity. There is a broad consensus among councils that provision of on-leash or off-leash dog-walking amenity is a basic need in the community, as the following accounts demonstrate:

“You don’t have to walk your dog off-lead in order for it to be exercised. There’s that perception out there that you can’t exercise your dog unless it’s off-leash. Well, that’s not true... It’s also about changing people’s mindset... it’s very difficult sometimes.” – AMO 7

“The good thing about it is that pedestrians and dogs are very similar. All they need is a footpath and dogs probably need less than that: as long as you have a leash, you can just walk around.” – OSP 20

“We have a lot of dogs that are of that type of breed that actually do need and require exercise and it’s an enrichment-type process where even just by simply walking it down the street on a lead is taking the dog out of its own environment and therefore is socialising it. Just by walking it down the street. It doesn’t need to meet anyone, it is being socialised. New smells, new movements, new colours, you name it. Whatever the case may be. Taking a dog off a lead in a specific area and throwing a Frisbee or a ball or whatever and once again getting that dog to interact with the environment, with other people, with other dogs, can only be of benefit.” – AMO 2

Dogs are therefore a legitimate user of public open space despite any controversy or lack of consensus over a need for dog parks or off-leash parks. Irrespective of whether the council or community support these kinds of ‘dog friendly’ installations, dogs still have a need for basic amenity to allow them to fulfil their need for stimulation and exercise. The innate needs of dogs are unascertainable with any conviction; AMO 2 nevertheless reasonably postulates dogs have a need for sensory enrichment. The illustrative canine capability typology in Chapter 6 included a need for play; there is no reason however why this play cannot happen privately indoors, in a backyard or on a leash in public open space or the broader public realm. That is to say, provision of off-leash facilities is important in presenting opportunities for owners to provide sensory enrichment for their dogs, but such amenity appears to be optional (see also Chapter 12).

The financial contribution of dogs in the community

In order to consider the broader questions of how amenity for dogs is planned, I begin by understanding the stake of dogs in society. In Chapter 2, I established that dogs provide society with some health and social benefits and consequently that dog ownership has some intrinsic value to urban communities. Registration fees provide an interesting window through which to analyse this standing from the council's perspective by asking the question of whether the fees are paying for a service or a privilege. I then discuss the effects that dog ownership has on the broader community.

Under section 10 of the *Domestic Animals Act 1994* (Vic.) ('DAA'), all dogs over three months of age in Victoria are required to be registered with the council where they reside. In 2014/15, the annual reduced fee to register a dog, for which most dog owners are liable, ranged from \$21.50 to \$69.50 per dog across the 31 councils of metropolitan Melbourne (see Appendix 8). The fees are set by councils independent of advice from the Department of the Environment and Primary Industries ('DEPI') or provisions in the DAA. Councils with more affluent communities appear to charge higher registration fees relative to councils with less affluent communities. Importantly, councils which charge higher registration fees are not necessarily found to incur higher costs of providing animal management services for each registered animal (notably this comparison ignores infringement revenues which may vary substantially across councils). My statistical analysis lends support to the notion that registration fees pay for a privilege rather than a service, inviting critique of the purpose of registration fees (see Appendix 10).

In exchange for their registration fee, dog owners receive a registration tag which provides the privilege of identifying the dog should it become lost. The registration fee also contributes to funding animal management services including education, impoundment, compliance and enforcement functions; however, when a service is rendered, often a further payment is incurred by the owner in the form of an infringement notice. The registration fee thus appears to help both councils and dog owners in a range of ways, for example:

“So we try to reunite the owner... or the dog with the owner straightaway so we encourage obviously updating details. So every year for three months of the year, we have an auditing process where we clean up the system, so it’s constantly up-to-date. And we also promote that during our pet expo where they can update their details and get a free tag if they’ve lost their tag because that’s our priority obviously because without that information it’s an issue for the dog owner and obviously the dog.” – AMO 7

“At the moment, the primary focus for us is getting compliance with registrations and that has to take an enforcement component. The key issue is if we have animals registered, we can communicate with the owners about what’s acceptable behaviour... So a huge amount of really what we do is trying to educate the owners but... the fundamental starting point is if we can get at least close to full registration, we’ve at least got that way to get in contact with the owners. Registration is absolutely the primary focus.” – AMO 17

Registration compliance is clearly an important focus of animal management in councils to improve the efficacy of the animal management services and increase council revenue more generally. DEPI financially benefits from improved registration compliance: a fixed \$3.50 levy for each registered dog is collected by council on behalf of DEPI to fund the educational, compliance and enforcement programs of the Bureau of Animal Welfare in accordance with section 69 of the DAA. There is however no requirement in the DAA for councils to allocate the net registration revenue (after disbursing the levy to DEPI) to animal management activities. There is nevertheless a general intention, if not traction, from councils to show prudence with how registration money is spent, as observed by these interviewees:

“I’m very conscious of using dog owner’s money and I want to be able to prove to you as a dog owner that this is being used wisely and we’re utilising it to the fullest.” – AMO 3

“...my argument was you’re getting \$1.5m out of the community for registrations. Do you not think you should put some of it back to the dog loving community to give them a reward for what they’re paying and actually give them an opportunity to learn something?” – AMO 21

Registration compliance is vital for the welfare of lost animals. It is not the animal’s choice to be unregistered, yet it is the animal which suffers if lost and unregistered. Improving registration compliance is perhaps the first step toward improving responsible dog ownership in the community and increasing the community’s awareness that dog owners are responsible for the dogs in their care. Any methods which

successfully address registration non-compliance can thus only help to improve the welfare of dogs in the community (see also Table 13 on page 122).

As discussed throughout much of Chapter 10, many councils struggle to fund anything more than the bare minimum animal management functions; projects which improve amenity for dogs would likely fall outside of that scope. In order to circumvent this, a DEPI interviewee suggests the collection of a capital contribution from dog owners in the form of additional levies to build new facilities for dogs. Such a levy however introduces additional financial burden on current dog owners and intergenerational funding issues. Some mixture of levies on current dog owners and on rate payers however ought to address any excessive burden on current dog owners to make capital contributions for works in favour of long-term improvements to dog amenity.

The social contribution of dogs in the community

In addition to direct financial contributions in the form of registration fees and infringement payments, dogs in the community also benefit the broader health system through improved physical and mental health outcomes of dog owners. Dogs are also shown to provide important companionship and basic socialisation for those who live alone and may otherwise be isolated from others (see Chapter 2). Accordingly, a number of councils do speak of dogs as positively contributing to the social fabric of the community through these excerpts from their *Domestic Animal Management Plans*:

“Council recognises the value of pets to many residents and families and the wider social, health, wellbeing and economic benefits they bring.” – Bayside City Council (2012a, p.4)

“Council supports and facilitates the benefits of animal ownership and companionship, encourages statutory compliance and promotes responsible pet ownership through education and enforcement...” – City of Kingston (2012, p.2)

“The City of Port Phillip encourages animal ownership and recognises the positive benefits associated with pets. Animal ownership can provide community members with opportunities to connect with other people and encourages greater use of open space.” – City of Port Phillip (2012, p.7)

“The City of Stonnington recognises the importance of companion animals in the community. Companion animals are beneficial to people’s health and wellbeing as they not only benefit us psychologically, but also physically and socially. The welfare and care of all companion animals is a priority within the municipality and in undertaking its statutory obligations, Council will always endeavour to ensure that no animal is unnecessarily killed or harmed and that wherever possible, all unwanted animals are re-homed.” – City of Stonnington (2013, p.1)

Reflecting on these excerpts, a number of interviewees spoke positively about the effect that dogs have on the community. Some interviewees described dogs acting as a ‘social lubricant’, a social effect whereby the presence of dogs inspires interaction between strangers in public places that otherwise would never take place. Dog parks are an incubator for such interactions, performing the dual role of a community meeting place for humans as well as a venue for off-leash activity of dogs (see Chapters 2 and 4 for background literature and Chapter 12 for critical discussion in context). Building community initiatives which encourage such opportunities only stands to enhance the perception of dogs in the broader community as in these diverse accounts:

“... a dog off-leash area... they [dogs] are not the highest [priority], but they’re sort of not forgotten... We’ve changed our perspective on them because they are community meeting places and dog areas and dogs, I think if you looked at the population per capita and how many dogs there are and how many animals people have... I think most dog walkers feel more comfortable having all the dogs in one central place, they stand there, the dogs run around and go crazy while they chat to their neighbours. It becomes a bit of a meeting point for them.” – OSP 20

“[A] little group that met every day in that park with their dogs and got to know each other and then became a social network: ‘We are a social network that’s formed there, and now the animal management officers are coming and telling us that we’re not legal because we can’t stand there with our dogs on a leash and have a chat. That’s not going to make sense, we need to let our dogs off the leash while we stand there with our cups of coffees and have a chat.’ And I thought it was a good argument. You know, they didn’t want... and so moving them to ***... it’s like, ‘No, no, no! As a network, we’re not all going to move down there. This isn’t just about exercising our dogs, this is about social networking.’” – AMO 9

“We had a couple of people coming forward saying: ‘I really hadn’t used the park, I’m not a dog owner but I have kids, I was over visiting ***, saw the dogs, thought it would be a good opportunity to interact with my kids. I love the park now because the kids go, I’ve got the benefits of them interacting with good, well behaved dogs, etc. and I don’t have to own one myself’.” – AMO 8

The ‘social lubricant’ attribute described by these interviewees is not present in all dogs however. Individual dogs can have a heightened tendency to show aggression or other

anti-social behaviours, through expressing attributes such as an innate fear or anxiety, peculiarities of their breed, poor training and neglect at home, among other things. Unsurprisingly then, dogs are not universally desired members of the community, with many people concerned with the perceived or actual threats of zoonotic disease, nuisance, dog bite and general conflict with humans and other animals:

“There’s a lot of presentation of dogs as good for the people, the social lubricant, but there’s a lot of people that think of dogs as pests. Dogs are dangerous, they’re polluting, they’re barking, they don’t want dogs. And a lot of our ethnic community are afraid of dogs for very good reason because in the countries where they came from, dogs were dangerous and carried rabies. And so you avoided them, or in a religious sense, dogs are dirty animals for probably the same reasons. Avoid dogs because you catch disease from them and they’re dirty things... a lot of people in the community think that dogs should be kept at home, they certainly shouldn’t be biting people.” – DEPI

“The issues come from dogs being off-leash and not interacting well with the community, and that’s because we don’t teach them how to interact. We socialise, but we don’t teach them how to interact... if you take an aggressive dog out into the park, we get this all the time, people go, ‘We stay away from that one because it rolls my dog, gets too boisterous, blah, blah, blah’. The owner just sees the dog as having fun. Other people stay away from it. So it’s interacting, but not in a good way.” – AMO 8

The anti-social behaviours described by these interviewees need not be incongruent with the dogs participating in the community however, the risks are nevertheless heightened. The consequences of losing effective control are exacerbated for the community due to the perceived risk of dog bite and other infractions, emphasising the importance of responsible dog ownership and the effectiveness of the council’s (and DEPI’s) educational, compliance and enforcement programs in order to ensure the community is safer.

The provisions in the DAA to manage declared dogs and dangerous dogs exist to improve the safety of the community by mandating heightened controls for particularly threatening dogs; for dogs which do not quite meet this standard, the owner has an obligation to exercise responsible dog ownership. It appears this ‘middle band’ of owners presents the greatest risk to the community since they lack the heightened oversight of the council and, consequently, lack an urgency and compulsion to act in the interests of the community in managing their dog:

“So many dogs used to get brought to the pound: ‘got to put it down, growled at my child’. What with circumstances, I’d go through it a bit. That’s just bad management, you haven’t trained the dog properly: ‘It’s got a streak... it’s got a streak...’ No, it’s because you’ve allowed it... you don’t understand the pack mentality of the breed of the dog.” – AMO 8

“Because I think that part of the issue is that people will buy animals that they like the look of or they like a particular breed.” – AMO 17

“Put yourself back into a child’s perspective, even if their parents are there, walking along and holding onto their child’s hand, and inadvertently that dog happens to get close to that child and the child puts its hand out thinking, ‘Pat the little fluffy creature that looks like the toy he got for Christmas. Wow look at that, a live one!’ And a little nip because the dog doesn’t have a muzzle on it, ‘cos the dog is known to be a nipper or a biter.” – OSP 15

Community education on safety around dogs mitigates the risk posed by irresponsible dog owners, however unfortunately councils and the Victorian government each have extremely limited funding to support education programs targeting dog owners (see Chapter 10). The appetite for community education programs ought to be self-reinforcing, however it is incredibly difficult to assess their efficacy and attribute their benefits to particular community outcomes. With this in mind, if councils (and DEPI) adopt a proactive stance on community education, in time this ought to improve responsible dog ownership behaviours and a general acceptance of the need for such programs ought to follow.

This section has established that dogs have some legitimacy to use public open space and they make both a financial and social contribution to the community. I now turn to examine the drivers of urban amenity for dogs. In looking at both demand and environment, the following section provides some insight into how councils speak of dog owners and dogs. Through the words of planners, the community’s perception of dogs is gradually understood by examining different situations and phenomena found in the urban environment.

11.2 Dogs and urban amenity

The preceding section examined the question of why amenity ought to be provided for dogs by councils. Dogs are legitimate users of public open space and make both a financial and social contribution to society and were earlier shown through the literature and through my study to have certain rights and at times be denied certain rights. This

section explores the drivers of providing urban amenity for dogs as a precursor to understanding how amenity is created for dogs which is examined later in this chapter.

Community demand and urban amenity for dogs

Finding 10: Dog owners can act to improve the compliance in the community in two ways: passive responses attempt to improve the perception of dogs in the community by isolated, individual action, whereas active responses attempt to improve the compliance of dog owners in the community through peer education and pressure. In order to effect real and lasting change in community behaviours, a peer education and pressure model is suggested as being more effective than artificially improving compliance rates through temporarily adjusting the perception of the community. The educational model can also be council-run.

As one animal management officer succinctly remarks:

“Look, if you do the right thing, you probably get more stuff.” – AMO 3

If a dog owner does the right thing, e.g. always picks up dog litter, obeys off-leash ordinances and ensures their dog is adequately stimulated and not a nuisance to neighbours, then they may feel entitled to greater amenity as a responsible dog owner. Entitlement is one kind of cultural driver and sets a baseline expectation of how the community ought to behave:

“I would imagine it is more proactive. It’s just the community are expecting more things for their dogs I think.” – AMO 21

“You have people who ‘own’ the beaches, they will constantly fight us in relation to their dog being off or on the leash in areas: ‘It’s not doing any harm.’, ‘I don’t understand.’, ‘I’m a local, I pay my rates, why can’t I bring my dog here?’, and then they’ll be ringing you the next day about a dog off leash that some bloke got out of his car, ‘You know, he’s not a local.’” – AMO 8

“But part of the issue is we’ll have off-leash areas designated but people will still let their dogs run off-leash wherever they feel like it and then be quite upset when they’re told that that’s not... that’s not appropriate.” – OSP 13

“There’s an entitlement as an Australian to own a dog, you know, that’s how we see it. And so we have to manage all those things.” – AMO 8

These accounts describe a sense of entitlement which grows in the community through culture or as the community accustoms to a particular amenity or freedom.

Once additional amenity is provided by council, the community appears to become more compliant as goodwill is fostered between the community and council. In other

words, the community appears to recognise that if they do not adjust their behaviours, the amenity offered to them and their dogs may be removed:

“It’s the dog litter that’s always the issue, but generally speaking once you get a park that you get... from what I’ve seen in the parks that I’ve used... you get people who will pick up waste from other dogs because they don’t want to lose the space. It’s that important to have that off-leash area, that safe off-leash area.” – AMO 17

“You have dog-walking groups particularly in ***, where they actually sort of put a bit of ownership on the reserve, but that can be a positive thing as well because then they self-manage, and if you’ve got some new dog person that turns up and their dog, they’re letting their dog defecate everywhere and all this, the peer pressure is... you know is, ‘Mate, if you don’t pick up after your dog and keep control of your dog, we could lose this park as a dog [off-leash] area’. So it’s the peer pressure... They share the reserves with other stakeholders and they seem to get on alright.” – AMO 5

“What we actually find in a lot of our bigger reserves, where there’s a number of dogs... they start to become self-governing, self-managing.” – AMO 8

This behavioural response from dog owners can manifest in two ways, one being a passive response which improves the perception of compliance by the broader community and the other an active response which improves actual compliance of the dog owning community. Whilst both acting in the interests of the dog owning community, the agency of the passive respondent is directed towards fellow dog owners whereas the agency of the active respondent is towards both dog owners and the broader community. In other words, the active respondent is an agent of external change. A pervasive apathy of the broader community to concern themselves with what amenity is afforded to dogs reinforces this effect, as in the following account from one interviewee:

“Dog owners tend to be far more vocal and therefore get greater resources than are necessarily needed by them. They get too much leeway about off-leash spaces on beaches or whatever because most of the rest of the community is apathetic until it affects them...

...If you look at ***, nobody used that park, nobody cared about it, nobody looked at it... the minute we put in that people could... dogs could go there... all these residents, who had never visited the park, became entitled about that park. It’s my park, it’s my backyard, it’s always been quiet. Now I’m going to have barking dogs there...

...Where the normal residents go crook, the non-dog owner, is where it’s in a playground or they feel that their particular activity is threatened.” – AMO 8

Councils normally create amenity for dogs and then a positive change in compliant behaviour on the part of the community is expected to follow as a consequence. It is very difficult however to directly ascertain the converse situation has taken place, i.e. where a council has created amenity on the basis of a positive change in compliant behaviour on the part of the community, unless the council overtly states that the new amenity is a response to such behavioural change; such an admission was not disclosed in either my interviews or through my review of council documents.

Nevertheless despite the best efforts of councils and DEPI in educating the community on the importance of complying with local laws, there remain some in the community who will never be compliant. Given the relationship between urban amenity for dogs and responsible dog ownership behaviours, their behaviour represents an inefficiency which permanently deprives the community of a certain amount of amenity. The presence of this segment of the dog owning community leaves a negative impression of dog owners more generally, for example in the following interviewee accounts:

“People are generally law abiding people we deal with. 80% of our issues are with 5% of the population. Most people do the right thing. That 5% will not change irrespective although, I always have issues with them.” – AMO 2

“It’s a certain section of a park and that’s it. If people know... the dogs are over there, that’s fine. But then where we have the trouble, when the negativity comes, is where dogs here, owners allow the dogs to run over here [where they’re not allowed]. Because they leave the area, ‘Oh, let’s just walk the dog off the lead,’ and that’s where we get the problems.” – AMO 3

Of other park users: “...going around with a plastic bag picking up dog poo that the owners have left there, because during the rest of the week when it’s not being used for sport, it’s being used as a dog park.” – OSP 15

The relationship between urban amenity for dogs and responsible dog ownership behaviours appears to also work in reverse. If councils proactively increase amenity for dog owners, then dog owners appear to (eventually) take more ownership of that public open space and become more compliant. Likewise, if councils take away amenity from dog owners, then they do need to compensate dog owners in some way otherwise they face repercussions which potentially reduce the level of responsible behaviour.

Responsible dog ownership is a form of currency which dog owners can use to gain favourable amenity in the long run; however such amenity comes with an opportunity cost. Public open space is highly contested and examining the relationship between

urbanisation and amenity introduces the question of balance (see also Chapter 12). Not all uses will complement one another and questions of inclusion, exclusion, prioritisation and balance arise when making decisions. The space is contested and the different user groups may be in disagreement. Whereas the question of demand centres on individual and community preferences, urbanisation brings in the influences of urban cultural structures and practices.

Urbanisation, urban amenity and planning for dogs

Finding 11: Default off-leash ordinances are commonly found in rural communities. These are not aligned with the expectations held by an urbanised community of how dogs and dog owners ought to behave. This lack of alignment makes them both difficult to understand and difficult to comply with in urban environments which in turn jeopardises the efficacy of any enforcement action.

Amenity for dogs is affected by the process of urbanisation. Each year sees the world becoming more urbanised; Melbourne is no exception as its population continues to grow through a combination of greenfield development and urban infill; there nevertheless remains pressure to ensure the appropriateness of the development for the community:

“When you look at like Melbourne, say Southbank [CBD fringe], and all the high density residential developments are happening, even urban planners are saying they’re probably not great for humans, there’s no human scale, so people aren’t really thought of in terms of those big developments.” – UP 25

“We support higher density but it’s got to be in the right locations and it’s got to be the right design.” – UP 24

These accounts of urban planners hint at a trade-off between residential and community amenity. UP 25 describes inner-city tower developments as lacking ‘human scale’; the surrounding high urban amenity appears to drive this high demand for dwellings. UP 24 speaks of a normative ideal however it remains to consider what such development might entail, and where. Accordingly, the following planners describe the interplay between residential design and amenity for dogs in the community:

“I guess part of what planning does in terms of provision of housing is to provide a range of different dwelling types and sizes for different lifestyles. So part of that different lifestyle could be people that have dogs, so making sure that those different types of dwelling and houses are fit for purpose. A certain percentage perhaps... But I guess to me it’s a multi-faceted approach... So part of it is having that open space, which is in like walking distance of your house... to have facilities close by which allow you to kind of be part of the community, with your dog, so footpath trading policy, so going out to a café or a restaurant, having outdoor areas where you can sit with your dog. I think you know roads management comes into it as well, so having nature strips are really important because when you’re walking your dog, you know obviously they need to go to the toilet.” – UP 10

“But whether or not it’s about changing the approach, because I think you do need to design it in to some degree, well it helps anyway to have a rooftop garden, and suitable access to get in and out, and it obviously means how the public realm’s treated outside as well, that there’s a park nearby as well, it’s ideal obviously. If you can get a developer that’s interested in marketing a property like that, you’re going to have ‘like’ owners potentially.” – UP 22

These urban planners describe the importance of appropriate residential housing to accommodate dogs which may be the simple provision of private open space through to ‘fit for purpose’ design. Furthermore, having nearby green space – ranging from designated open space to suburban nature strips – provides opportunities for dogs to gain sensory pleasure from nature (see also discussion on page 200, in particular the remarks of AMO 2); the accommodation of dogs both walking and sitting on pavements and at cafés and the like is important too. It seems however that achieving these urban design aims is as much benefiting humans as dogs; indeed, the benefits to dogs seem to be ancillary to humans at best. Consequently, urban planners appear unconvinced on how urban amenity for dogs can be achieved in practice through the Victorian planning system; in the words of one planner:

“I’m not sure what planning scheme amendments we’re going to get about dogs... so I don’t think it will happen with planning scheme amendments.” – UP 24

Urban planners can use formal mechanisms such as the planning scheme or employ informal mechanisms such as localised policy and strategy formulation. UP 24 succinctly encapsulates the trouble of urban planning and dogs, a topic discussed in detail in Chapter 13.

As an alternative to employing formal or informal urban planning mechanisms to plan for dogs, urban planners suggest that market-driven responses may be more effective in increasing the urban amenity for dogs:

“I suppose coming back to that market-driven demand side of things, it may be that dog owners in the future choose not to live in the CBD of Melbourne and in terms of that prioritisation it may make perfect sense not to be creating dwellings in the CBD that can accommodate dogs because it’s the centre of economic productivity and there are other priorities that outweigh the need to create dwellings in that particular location that can accommodate a dog.” – UP 19

“If someone did come in with an application to do with... mainly focussing on dogs, like a dog friendly unit development that want a certain part of the area to be allowed for dogs or something like that. Then we say okay well we’ll a look at the objectives of our scheme or keep that in mind when we do the process.” – UP 25

“If we’ve got a development community who recognises that there’s quite a lot of a market out there for people who want to own dogs and to have a rooftop access or arrangements that are more conducive, obviously body corporates have a final say too, but to me it would be a developer-led thing that you can actually get apartments designed in order to accommodate an animal.” – UP 22

Urban planners appear to support the notion of developers constructing dwellings which specifically accommodate dogs, certainly more so than using the planning scheme or other planning mechanisms to plan amenity for dogs. In part, this appears to drive from a lack of consensus on planning for dogs in urban environments, in turn exposing councils to political risks should they choose to admit dogs as subjects of their plans and be seen to lead the shift in market. The role of developers then becomes one of risk management on the part of councils too:

“If you require everyone to have enough space to have a dog but only... 4 out of 10 households [own a dog], you’re potentially creating this... it’s an inefficient use of land, or it’s like if I’m a city person wanting to live in a one bedroom apartment, I should be able to do that kind of thing. It’s sort of a market-driven thing in some ways. If I want a dog, I’ll buy a house that can accommodate a dog or build a house that can accommodate a dog.” – UP 19

UP 19 hints at universal ownership or, at the very least, a universal appreciation of dog ownership in order to justify planning specific dwelling types to accommodate dogs outside of developer-led activity. Along with consensus in planning, this is discussed in some detail in Chapter 13.

In addition to issues around dwelling design and how those designs accommodate dogs, higher density urban environments introduce challenges in planning community infrastructure which supports amenity for dogs. These compact living environments reduce the opportunity for a dog to enjoy private green space and, in turn, increase the

demand on public green space and underscore the importance of public open space planning in planning for dogs in urban environments:

“...when you have medium density housing you obviously lose lots of front yard space, so it sort of satisfies the minimum 25 square metre private open space requirement and sometimes you have your rare backyard, like fences all around, so dogs wouldn’t have any view. So it’s quite limited constraints for dogs to play with.” – OSP 18

“In housing, by having a variety of densities, then you’re more likely to get your dogs in these ones where they’ve got to have [private] open space of... 60 square metres. So in some ways that supports dogs in those locations.” – UP 24

A lack of access to public open space can lead to downstream nuisance. For dogs that do not get adequate exercise, the community then faces a greater incidence of nuisance from bored and restless animals (e.g., barking, escaping from properties, etc.; see Chapter 10). In other words, providing inadequate amenity for dogs in high density environments may lead to many downstream nuisances which negatively affect the perception of dogs in the broader community.

On the other hand, whilst greenfield developments are typically lower density than urban infill, they do suffer from a disparity in culture whereby the existing community often still behaves in a way reminiscent of semi-rurality but, over the years, the community has gradually urbanised around them. One manifestation of the persistent semi-rurality of a number of greenfield developments are default off-leash ordinances. These are commonly found in rural settings where dogs and the community generally experience less conflict as both the population and population density are lower. Distinctly urbanised settings tend to have the opposite policy (i.e., default on-leash ordinances) to more stringently regulate and control dogs in those environments in order to reduce the incidence of conflict from the significantly greater population density and often greater population of both humans and dogs as compared with rural environments.

Both Casey and Knox in Melbourne’s outer east have retained their historic default off-leash ordinances despite both having transitioned from predominantly rural or peri-urban to predominantly urban municipalities. These ordinances have not kept pace with the increasing urbanisation causing issues with compliance as people struggle to comprehend the unexpected ordinance as these interviewees ascribe:

“At the moment they believe that dogs all had to be on-leash anyway in any case all over the place. It’s not a well-known policy that we have got in place and people, like I said before, still struggle with it.” – Casey AMO

“We’re a growing municipality and a lot of people are coming from other municipalities with their dogs where they do have the capacity to take their dog off-lead in a particular area, and that’s what they’re expecting here but we don’t have it.” – Casey AMO

“It’s common in country areas... more common in country areas... but it’s something that probably needs to be looked at because it’s... from an enforcement point of view it makes it a little bit difficult to actually enforce off-leash areas; people are really unclear about where they’re allowed off-leash and where they’re not...” – Knox AMO

The default off-leash ordinance in both Casey and Knox is an example of an amenity for dogs that council provides which is not actually what the community wants. It might be successfully argued that in general, off-leash ordinances are considered to contribute to the amenity for dog owners and dogs. The question then becomes why having so many parks off-leash in these councils detracts from amenity. In keeping the default off-leash order, the broader community was found to become confused as the Casey and Knox ordinances fail to align with the remaining 29 metropolitan councils. The community in this instance perhaps does not intend to be non-compliant, but difficulty arises in complying with regulations that lack the community’s ‘common sense’; the default off-leash ordinance is not aligned with the expectations of an urbanised community as to how dogs and dog owners are expected to behave. Enforcement is then made more difficult as the officers struggle to explain why they are enforcing a rule which does not appear sensible, bearing some similarity to the difficulties experienced by officers in enforcing effective control regulations (see Chapter 10).

The provision of amenity for dogs represents a trace of the dogs’ emerging political identity. Likewise, any intention of councils to provide amenity for dogs represents a social disruption and risks possible opposition from the community. There are a number of perspectives through which humans view dogs, and there are a number of concerns, some legitimate and some perceived, which form barriers to increasing amenity for dogs. This leads to considering how public open space is planned and created for dogs and how urban planners incorporate dogs into their plans in practice, the respective subjects of the next two chapters.

12. OPEN SPACE PLANNING FOR DOGS

In Chapter 11, I established that dogs have a legitimate financial and social stake in the community and they introduce opportunities and challenges in planning of private dwellings and the broader urban public realm. Following on from that discussion, this chapter examines the planning and creation of public open space for dogs.

In section 12.1 I explore the planning of public open space for dogs, these spaces being important in providing dogs both freedom and opportunities to realise their capabilities in urban environments (see Chapter 6). In the first half of this section, I find that councils lack consensus on how they ought to plan public open space and do not generally consider dogs and dog owners in the initial planning of public open space. In part, this is attributed to internal governance shortfalls within councils but nevertheless councils through their actions and inactions impact the opportunities afforded to dogs and their owners. In the second half, I find that councils may take into account public open space in neighbouring municipalities or that under Victorian government control when planning public open space, however they largely ignore the planning that those external authorities are undertaking in relation to that space. This lack of external stakeholder engagement exposes the council to the risk that they may undersupply public open space in the event an externally controlled space becomes unavailable.

Once public open space is planned, sections 12.2 and 12.3 consider how such spaces are created¹⁰. I begin this discussion in section 12.2 by exploring the question of balance and the ‘othering’ of dogs when planning public open space and balancing different community needs. A language of anthropocentrism emerges when considering how parks ought to be allocated between dogs and humans, with humans taking on both a role steeped in speciesism and agency over animals. The role of fencing is introduced in section 12.3, expanding on the debate of exclusivity and inclusivity of urban parkland and relating the provision of such urban amenity back to the behaviours of dogs and responsible dog ownership in the community.

¹⁰ Note: The contents of these sections have been adapted and published in Carter, Day and Fryd (2015).

12.1 Planning public open space for dogs

Chapter 11 discussed the need and demand for urban amenity for dogs. This section consolidates these observations by examining how public open space is planned for dogs. I begin by examining the planning of public open space in a local context, finding that the role of masterplanning varies between different councils and the degrees of success can tie back to my earlier discussion on ontologies of council (see Chapter 8). Following this discussion, I examine the role of regional planning in the provision of public open space, observing that often the existence of externally-controlled public open space is accounted for, however the planning for the future of that open space is ignored. I then suggest how regional planning of public open space might be improved.

Local planning of public open space

The local planning of public open space usually falls to open space planners that often have a background in landscape architecture, urban design or urban planning. Open space planners are responsible for the network of public open space and how that network functions as an overlay to the land use planning undertaken by urban planners; the work of open space planners and urban planners nevertheless has surprisingly little overlap in practice. Animal management officers in their planning for dogs in the community typically have little input into the open space planning process despite the importance of public open space to dogs and their owners. The following accounts illustrate the difficulties inherent in the operational structure of councils:

“I think... separately planned areas [of open space] has been the approach that’s been taken here previously and it also reflects the way a council or a government body is structured in that each department in a council or a government body often has a single use.” – OSP 26

“I think the problem in council is we often just end up in our little silos and we don’t have those cross-conversations.” – OSP 4

These observations are consistent with the institutional ontological framework introduced earlier (see Chapter 8). The different institutional ontologies generate a variety of push-and-pull factors in terms of internal politics, funding and prioritisation of their individual objectives and plans. These internal tensions make it challenging to find agreement in how a council ought to proceed with the following interviewees illustrating a contrast in approach:

“If you’re going to plan recreation areas, let’s start thinking about including dog play area facilities into our future planning, which we traditionally haven’t done here, and I think has really challenged them [the open space planners]. Now part of this process has come back with me asking the question: ‘We’re responsible for animal management from a legislative, I think enforcement perspective. Why am I straying into the planning of a reserve?’” – AMO 21

“It all boils down to the money but, in saying that, they’ve surprised me with *** Reserve. I did put in, ‘Can we get it fenced off?’, and now they’ve got some money in, and I think they forecast a lot of these things. Years ago, never had a forecast exercise on dogs, and I think council’s more aware now that we’re [animal management] being included with draft plans of all our parks.” – AMO 3

The financial resources which councils are willing to allocate to projects that improve urban amenity for dogs is limited. The opportunity cost of providing amenity for dogs is high and the prioritisation process which often spans a number of departments is values-laden. The cost of public open space amenity is not simply a one-off capital cost; rather, there are ongoing costs relating to maintenance, these tasks including routine upkeep such as lawn-mowing and gardening, safety inspections, repairing damage from vandalism and the eventual replacement of built infrastructure such as sporting pavilions. The following accounts illustrate the prominence of implementation and maintenance considerations when developing masterplans of public open space:

“Everything costs money. Because each department has to justify how they’re spending their money and a masterplan’s part of the way of going, ‘Look, we’ve got this plan, we’ve been to the community and we know how much it’s going to cost.’” – OSP 6

“Once the masterplan’s finalised, it will have an implementation plan which will give an understanding of what funds are needed and then that goes back to council when we’re talking about the masterplan as well... If you’ve got a particular project and you want to do it in stages, then each of the components costs this much and how we want to fund it, how it works, and then it has to go up as part of the budget processes at the start of each financial year to see whether or not we can get funding or if there’s already a funding stream available. Like we have a sports pavilion program where money goes to that every year, so we’ve got a rolling program to upgrade sporting pavilions in line with masterplans, playground renewal budgets, or we could use some of the open space reserve funds to fund some of the implementation of these masterplans as well.” – OSP 20

“Another group are worried about maintenance and then the planners are the ones generally trying to integrate all that stuff. But often the planners will tell us that they don’t want certain open space but when we dig a bit deeper we find that it’s for maintenance reasons or things like that.” – UP 23

Masterplanning of public open space is seen as a way for planners to justify their plans such that the allocation of money can be made fairly and with appropriate priority across a number of departments. Masterplanning allows a consideration of different individuals or community groups that may have a stake in how that space is allocated for use. There are many different users and uses, some of which are inherently conflicted, so the masterplan provides a means to balance those demands systematically, for example:

“And things evolve. For instance, grant money became available, so this particular thing was done, like the athletics for example. So the masterplan was driven by community but it was also driven by other factors... and so Council took the opportunity and grabbed it for various elements there.” – OSP 14

“Do you really want a whole series of isolated things or can you create a plan that encompasses all these things that work together? ... You don’t want to be designing five masterplans for one site. You want one site to be able to cope and all these things to be considered up-front. It may not be perfect, but it’s a better approach than isolating things into boxes.” – OSP 26

“So the open space... we’ll potentially talk about masterplans for open spaces and understanding how you can accommodate various user groups and there’s always confrontation with community about how they want to use the space. You know it’s their space, so that can help decide how to design it. But then that’s also making sure that... it’s inclusive for all sorts of people, so people with limited mobility and other needs, and so all those things need to be accounted for.” – UP 22

Masterplanning however requires substantial commitment from councils and planners, both financial and ideological. One interviewee opines at length that in the case of their council, masterplanning lacks worth on the basis that it is politically expedient to achieve piecemeal change without necessarily considering and approving a wider program of work that would typically comprise a masterplan:

“But you’ve also got a council that doesn’t see the value in masterplanning because it’s considered a waste of time; but it needs to happen because they don’t understand the larger implications of designing like this. It causes a lot of problems... I don’t think they know enough about the planning process to really understand what a masterplan does. They see it as a whole lot of expensive actions that never get done. So there does need to be a commitment to implementing the plans.

Masterplans are there to sort of guide future development I suppose, of staging of things, in a way that brings all of these different interests together. And that I suppose is the point of it. The problem in the planning process and the actual implementation is there needs to be both the money and the willpower and the commitment to implementing this.

And so often I think it's been easier to say 'the conservation space needs X' or 'we need a playground' and that gets developed, because it's small, understandable and able to get developed within a budget; whereas if you looked at this site, this is a large and expensive process to start to pull this stuff together. Large, expensive and complex, and often the complexity is not understood. And this is probably the case with any landscape architect or urban designer, doing any public project, is that you're against... the value in what you're doing is not necessarily seen because people have very specific interests in things and they don't look at the whole." – OSP 26

The difficulties encountered by councils in the planning of public open space can be in part traced back to the multidisciplinary nature of open space planning and the high degree of cross-discipline and multi-stakeholder engagement that open space planners need to obtain in order to construct and implement their plans. OSP 26 speaks of masterplanning as needing "the money and the willpower and the commitment" in order to implement the plans once they are formulated. In that sense, the masterplanning process and the *Domestic Animal Management Plan* development process share substantial similarity. Masterplanning is a way to implement a holistic vision for a given site; however, that implementation often takes considerable time, with ample opportunity for questions to be raised regarding progress. In a sense, this makes the activity of masterplanning somewhat idealistic in what is a highly political, cyclical planning process. In practice, perhaps the ideal for the local planning of public open space might lie somewhere in between piecemeal planning and masterplanning.

Open space planning can suffer from a lack of communication between different departments at council and the planner is burdened with managing a range of stakeholders at council, each with their own ideas and priorities. This leads to different assessments of the opportunity cost of planning public open space in favour of dogs, these assessments steeped in personal and institutional values of the place of dogs and dog uses relative to other uses of public open space.

Masterplanning is a possible way forward to plan public open space in a more organised way however some planners in councils and government view it as a low yield exercise compared with 'traditional', piecemeal planning. The Melbourne Metropolitan Board

of Works engaged in metropolitan-level masterplanning until the 1980s, following which their planning functions devolved to councils and other state statutory authorities. What remains today is metropolitan strategy and vision-making, with recent iterations of such plans including *Melbourne 2030* and *Plan Melbourne*, rather than any attempts to make more detailed metropolitan masterplans. This attitude could be attributed to the political reality facing governments and councils. In other words, there doesn't appear to be an ideal structure of local public open space planning; in any case, no consensus was identified from my interviews.

I now turn to the regional planning of public open space, examining whether there is comparatively greater scope for consensus and a way forward. Whereas local public open space planning has grassroots interested publics and internal stakeholders, regional public open space planning involves different, often external stakeholders with different interests. The following subsection will examine how councils take account of their neighbours' public open space and that of state statutory authorities, with a view to improving the planning of public open space for dogs.

Regional planning of public open space

Finding 12: Reliance on borrowed amenity exposes a council to counterparty risks which need to be appropriately managed to ensure a continuity of adequate public open space availability for residents and visitors. These risks are generally poorly understood by open space planners in council and thus left largely unmitigated by controls. An over-reliance on such resources then can lead to an undersupply of public open space should an external stakeholder decommission a space for maintenance or other reasons. Compounding these problems is a lack of regular forums for planners to communicate with neighbouring counterparts concerning public open space issues.

Finding 13: Open space planners sometimes acknowledge the existence of neighbouring public open space and other incumbent land of state statutory authorities when planning their public open space, however they generally fail to acknowledge the planning of that same space. This omission exposes the council to vulnerability where those plans alter the availability of that neighbouring public open space which the council has failed to take into account.

Public open space is a scarce commodity in Melbourne, particularly so in dense, inner city suburbs. There are ever-increasing demands on public open space, some activities requiring exclusive use of large areas of public open space over extended periods of time, e.g. the annual Australian Formula 1 Grand Prix hosted at Albert Park, together with other events like weekend triathlons that are smaller in scale but no less exclusive.

These situations expose any vulnerabilities in a council's public open space network and public open space planning, with one interviewee making a stark revelation that "we just don't plan for any of this stuff" (AMO 8).

One way that councils can mitigate these vulnerabilities is to create new public open space opportunities within their municipal boundaries. This action can then pose a separate, opposing risk of oversupplying space however:

"That activity and that use for that family type of park with those facilities needs to get picked up here, because it's not there. And so part of the open space strategy is saying that you need to masterplan, and develop, and buy open space here to plug that gap so they don't have to go to ***, they've got somewhere they can go to within walking distance." – OSP 26

"They shouldn't be relying on it [externally-controlled public open space], they should have their own specific program. They may say that they may have, let's say, a reserve there so these people here on this side of our boundary, they can have access to there. But that means we won't put a park right next to it because that would mean we'd have an oversupply of open space." – OSP 20

"And then, so we look at that strategic analysis of the whole municipality and that also links into you know what's happening in the nearby municipalities. '***, what do they have? I think *** Park's right there [on the boundary of the council] so we might not put a park there because they have this.'" – OSP 4

Once open space planners determine the 'right' size and location of public open space, they need to determine how best to provide that space for the community. Public open space is very costly to provide, particularly in inner city areas where land is scarce and in great demand from the community. The sharing of public open space resources across a number of uses and catchments can mitigate some of the vulnerabilities of an inadequate public open space network.

Public open space in a general sense is quite substitutable. Whilst no two parks are exactly the same, a quiet, leafy park in one municipality could easily substitute for a similar quiet, leafy park in a neighbouring municipality for residents living near the shared municipal boundary. In order to manage the many calls on a council's public open space assets, councils naturally become more reliant on their neighbours and on other means in which to provide an adequate amount of public open space for their residents and visitors within a reasonable distance of their homes and workplaces. This reliance on external stakeholders brings with it new risks which need to be managed.

In order to mitigate any undersupply of public open space and avoid risking an inefficient oversupply of public open space, councils turn to amenity already provided in their region but outside of their direct control. One open space planner introduced the term ‘borrowed amenity’ (OSP 20) to describe the common situation where a council implicitly or explicitly relies on public open space amenity of another council, Parks Victoria, Melbourne Water or other external body in order to satisfy the community’s expectations of an adequate supply of public open space amenity within a certain distance of their home.

The following planner describes the challenge presented by regional government as one of maintaining control; in other words, a council’s sphere of concern extends as far as what the council can control and no further (see Chapter 13 for more discussion on the subject of control in the context of urban planning):

“There’s a lot of challenges in taking a regional approach to issues in local government and I think whilst there’s certainly... gradually there’s more recognition between councils that they need to work together and that there’s benefits in working together. I think things like open space strategies often, by necessity, take the municipal view. Like we only have control over the open space within the boundaries of the city of ***, when in reality... our residents are using parks outside of our boundaries.” – UP 19

Open space planners sometimes do take into account the existence of public open space assets of other councils when doing their planning. For example, Stonnington includes neighbouring Fawkner Park, Alma Park, the Royal Botanic Gardens and Caulfield Park as public open space assets in their *Public Realm Plan*, with each of these parks located outside of the municipal boundaries (City of Stonnington 2010, p.36). Similarly in their *Open Space Strategy*, Port Phillip refers to Albert Park, Fawkner Park and Elsternwick Park as part of their provision of public open space (City of Port Phillip 2009a, p.34). Knox likewise acknowledges Parks Victoria and Melbourne Water incumbent space as part of its open space assets (Knox City Council 2012b, p.19). Bayside does not have the same approach however, instead each of its maps acknowledges only amenity within its municipal boundaries (although some of their open space consists of private golf courses so in that sense Bayside does recognise borrowed amenity; see Bayside City Council (2012b)). Similar to Bayside, Kingston does not take account of neighbouring councils’ public open space assets:

“The reason why we don’t... you know if there was [specific park on boundary of municipality] and thinking what’s happening on the other side of the road in terms of whether it needs... what the function is... it probably should show... there should be a map which shows it in relation to where all the rest are.” – Kingston OSP

There are a variety of different approaches amongst councils in my sample as to how borrowed amenity is acknowledged. Whereas open space planners sometimes do take into account the *existence* of borrowed amenity in making their own public open space plans, it is much less common for planners to take into account the *planning* of that borrowed amenity when making their own public open space plans. In failing to distinguish between *existence* (noun) and *planning* (verb), planners fail to place a distinction between taking account of another council’s planning activity (noun) and controlling that activity (verb). This emphasis on control leads planners to focus on their own open space assets to the exclusion of any actions which affect neighbouring open space assets:

“If they were to do something there, there’d be very little communication to us. If they were to close that park there, for whatever reason, we’d see a huge influx [of dogs]. Now, how do I manage that?” – AMO 8

“There’s very little we could do about that from my point of view because the network... the assets are fixed, unless there’s a change in use within that set. That’s through the high-level point of view, maybe at a more local level there’s a difference.” – OSP 13

“But I think it just comes down to the open space planning. I think when you’re looking at your overall strategy for a municipality, you look at... you can rely on other regional parks. But if you’re relying on your next door neighbour’s open space and they decide to close it, it’s bad luck really. It’s their land: they can do what they want.” – OSP 20

“So changes in the open space allocation of the council next door... or if they decide to close a dog off-leash park: what does that mean for our residents? So those sorts of things sometimes get missed out a little bit in the process, I guess.” – UP 19

These accounts describe adverse effects of the actions of their neighbours as outside of their control, subject to chance and broadly overlooked. Open space planners appear to focus on matters where they can influence change, matters within their control (urban planners face similar issues; see Chapter 13). In accord with this postulate, open space planners generally overlook opportunities for collaboration or lack success in

collaborating with planners from neighbouring councils in any coordinated, meaningful fashion, despite their best intentions:

“We can have some discussions about how we can improve services, but I can’t see another council giving us money to improve or upgrade our facility at this stage.” – OSP 1

“I think these things come up in a risk analysis and then it’s ‘oh, let’s have a better relationship with those stakeholders’. Often it becomes hard to action that because there’s all these other things that happen. But since there is a goal, to build that relationship and have those ongoing conversations is always tricky.” – OSP 4

“We have asked... we have tried... done that in the past and asked councils, it depends on whether it’s on their program or not with the money, the funding, if they’re up to that part...” – OSP 20

In contrast, Wyndham has successfully collaborated with five other western suburban councils in the ‘Westrails’ project, to “work out what are regional trails, how will they be rolled out, whether we need a standard in regards to construction and maintenance and signage” (Wyndham OSP). Perhaps what is most notable about this collaboration is that it concerns an individual project rather than a generic ‘get together’ forum which are more common across regional councils (e.g., the Open Space Planners Network, etc.). The lack of specificity of these generic forums may lead to their ‘optional’ attendance by participating councils’ open space planners and a treatment of such forums as casual rather than formal meetings:

“The Open Space Planners Network is a metropolitan network, but then we have a smaller group and meet casually and have lunch and things, talk about this stuff.” – OSP 15

“I think there’s someone from the open space team, there’s an open space planners’ forum which we might attend and discuss those issues but not everyone always comes to those meetings.” – OSP 4

The informality and general nature of these gatherings leads to less traction with open space planners and a lack of purposeful and implementable outcomes on the ground.

Recommendation 6: Open space planners at councils need to establish forums through which they communicate with their counterparts at neighbouring councils about plans for public open space in their municipality. Such forums, if taking place at an appropriately regular interval, then mitigate some of the risk associated with reliance on borrowed amenity, providing an opportunity for affected councils to plan for contingencies in coordination with their neighbouring councils. In order to maintain relevance, these forums ideally need to be tailored to the interests of all attendees and so may need to be smaller and more specific rather than larger and more generic. State bodies could attend by invitation or distribute information separately for discussion by councils.

Temporary, planned events which remove public open space amenity from the open space network, along with planned maintenance programs, provide a means to plan public open space availability in a forward-looking way. The annual Australian Formula 1 Grand Prix at Albert Park provides an example where the amenity of Albert Park becomes unavailable to the community over several weeks and could be an appropriate catalyst to have such inter-council communication between open space planners from nearby councils which are affected by the closure. In order to operationalise this recommendation, these kinds of catalysts need to be found and their importance agreed between councils to start a conversation. This conversation would consequently neither be generic nor casual as it concerns a particular event at an open space which is of importance to open space planners at attending councils, hopefully acting as a catalyst for further operational discussions on open space planning more generally.

12.2 The decision to allocate public open space for dogs

Chapter 11 examined the drivers which motivate needs or desires for amenity for dogs. Dog ownership has financial, social and cultural effects on the community, implying that dogs have a legitimate stake in the community and deserve the consideration of public open space planners. Following from this discussion, section 12.1 described how open space planners typically plan public open space in practice.

Once the decision to provide urban amenity for dogs is made, then the complex task begins to decide how that space ought to be created. Public open space is heavily contested, particularly in densely populated, urbanised regions, so how space for dogs is manufactured from this scarce resource is worthy of investigation. Once the public

open space is created for dogs, this can generate ripple effects through the community steeped in individual values of inclusion and exclusion.

Balancing different community needs

Public open space is a limited resource and with urban intensification that resource becomes increasingly contested:

“There’s just increasing demands all round on open spaces, so trying to balance that. And it’s quite often the most contested space in the city, because everyone wants a bit of open space and people have different views about what they want.” – UP 22

These increasing demands make an open space planner’s work more difficult, particularly in the inner city where land is scarce. In allocating public open space to dogs, the planner needs to therefore balance the needs of the dog owning community against a range of community interests, for example:

“Managing the interface between dogs, people and the natural environment in Bayside continues to be a significant issue for Bayside.” – Bayside City Council (2012b, p.107)

“And this is the thing, it’s about balancing the community needs and... put it this way, realistic delivery and outcomes against unrealistic... expectations I guess. So you’ve got to try and balance the resources and... then you’ve got non-dog owners against dog owners.” – AMO 5

“So the majority – the community gets the majority of the resource when they need it.” – AMO 8

Dog owners are spoken of as a group with a perspective on how open space ought to be used, but spoken of as ‘the other’, e.g. the ‘non-dog owners against dog owners’ of AMO 5 (above), the ‘normal residents’ of AMO 8 (page 208) and the ‘rest of the community’ of AMO 9 (page 241). This ‘othering’ is reflected in the allocation of public open space for use by dog owners with their dogs, where dog owners and their dogs might struggle to feature highly when councils speak in lofty and vague terms of the ‘majority’. This leads to considering how planners consider the multi-use of their public open space to cater for these ‘majorities’ and also the ‘minorities’.

Open space planners classify spaces by importance and function and, in doing so, often prescribe a primary function. Designating a primary function strikes a balance by prioritising a particular use, e.g. formal sports use, and allowing other uses to operate in

conjunction with that use. This is described as multi-use or multi-function open space planning, a trend evident in the contemporary planning of public open space:

“Part of the issue has been it’s a bit of a shift away from everything to everybody for all of these spaces to a stronger focus about some primacy for these reserves, but also what else can we support in the reserve.” – OSP 13

“Some people want to sit and have nice, contemplative space, and other people want it for active sport, or running, or whatever, so I think the most important thing we can do in the planning is recognise that we do have a diverse range of needs within our community and try and provide spaces that can be flexible, and adaptable and multi-use.” – UP 22

Planners recognise that there are simultaneous and often competing demands placed on scarce public open space resources. Designating a primary use supports the multi-functionality of a particular site, where the primary use takes precedence some of the time but otherwise the reserve is available for other uses. Some planners however recognise that their council is not as far progressed in these matters as others:

“The spaces need to work harder and be more functional over the long-term, rather than just being a sporting reserve for a few clubs who use it a few times a week or for someone who might wander in. But there might not be a playground there or there might not be anything else for anyone else to do other than take their kids to the footy.” – OSP 26

“If you can get that agreement upfront, that sporting, district reserves are going to be multi-functional and developed in the future as multi-functional open spaces, then that starts to change a whole series of ways that you look at those spaces.” – OSP 26

“We have quite a bit of work to do internally here in terms of negotiating some of those outcomes in terms of sharing the space a bit more, because it seems to be locked down for particular uses and nothing else gets in.” – AMO 17

In order to get public open spaces to ‘work harder’, this requires the primary user of a particular space to cede certain rights to that space at certain times in order to allow other uses to take place in parallel with its primary use or when it is otherwise unused. This appears to cause internal friction in councils as different departments vie for priority use of a given space.

Sports ovals are clearly an important public open space resource for councils to consider for use by the general public, including dog owners with their dogs, when idle. Conversely in some cases, sports clubs have space ‘locked down’ despite this lack of use, leading to an inefficient use of a limited resource. Consequently, the requirements

of a range of different user groups with legitimate claims to public open space need to be balanced:

“Sports ovals are only used 16% of the year: who uses them the rest of the time? So for a dog park, that might be used more, as a percentage of the time, but that’s only used for dog parks. Playgrounds we don’t fence because the whole park is a playground in effect. So we try and make sure everything is multi-use.” – OSP 15

“When we did the Open Space Strategy, because dogs were a big issue through that process, the biggest conflicts from memory were children at playgrounds and dogs, this is a weird one that I didn’t think about, children learning to ride bikes in open space and dogs, with the bikes, and then sports, people playing sports, or people trying to enjoy the space like for a picnic or something like that with dogs... And it’s often dog off-lead, isn’t it? Where they’re not controlled, where they can just run into whatever...” – OSP 13

Once a decision has been made to share public open space with dog owners and dogs, the open space planner then negotiates a number of barriers which control the allocation of amenity away from humans in favour of another species. A critical discussion on the allocation of public open space for dogs now follows.

Allocation of public open space for dogs: an overview

Finding 14: Human agency plays a fundamental role in the practice of planning public open space for dogs. This is a manifestation of speciesism and presents a barrier for planners wanting to increase the amenity for dogs. The planning which they do is ostensibly for the benefit of humans that own dogs, not the benefit of the dogs themselves. Examples include:

- Runt space
- Primacy of function on space
- Decisions to implement dog parks.

Finding 15: Dog parks are perceived by some councils to be for the exclusive use of dogs and their owners. This is shown to generally be the case, however the cause for the exclusion appears to be a product of the dog park’s location and lack of amenity for humans, leading to a less attractive space which humans otherwise choose not to visit unless they have a dog. Dogs and dog owners are the primary users of the dog park, however this is not necessarily to the exclusion of all others and it is incorrect for councils or the community to assert otherwise.

Public open space is a particularly important aspect of the public realm for dogs, providing an opportunity for dogs to realise basic capabilities such as exercise, socialisation and play (see Chapter 6). In urban environments, public open space plays an important role for many dogs as they lack private open space, the public open space

helping them to realise some of their basic capabilities. Councils are increasingly aware and supportive of the demand for dog amenity in public open space:

“What they seem to want is somewhere that they can take their dog off-lead and let them run and not be worried that the dog’s not going to run off onto a road or run into someone that doesn’t want to be around dogs and those sorts of things.” – OSP 16

Of the dog park: “It’s completely over-utilised, like the grass is worn off by the number of people using it, it gets muddy in winter, it dries off in summer, it’s been really popular. People are wanting places to take their dogs. And so there’s been a real push by councils to say that we need more of these dog parks... The councillors are very keen for this to happen, so at least that’s in our favour.” – AMO 21

All the while, planners recognise that urban environments, as a system, are built by humans, primarily for humans. The question of allocating public open space to dogs is examined by reviewing an array of barriers that were erected by humans to protect amenity for ourselves and, in turn, inhibit increasing amenity for dogs. The six fundamental barriers which emerged from the accounts of interviewees are as follows:

- Speciesism and anthropocentrism;
- Allocation of less desirable land for dog uses (‘runt space’);
- Human agency and planning public open space for dogs;
- Primacy of human uses in public open space;
- Perceptions of nuisance and maintenance burdens of dogs in public open space; and
- Perceptions of exclusivity of public open space where dogs are present.

Each of these barriers will be explored in turn through the words of the interviewees and the actions of councils. Together, these accounts provide an insight into both how the allocation of public open space for dogs takes place and why this may be so.

Speciesism and anthropocentrism

Firstly, the most fundamental barrier which planners establish in controlling the use of space is to decree that ‘parks are for people’:

“The park is there for people first.” – OSP 15

“Saying they’re for people... that still means that it could be people... dog owners as well.” – AMO 5

“And then again there’s probably another question and I don’t have the answer, but to what extent do you prioritise the needs of dogs over the needs of people? And that’s probably like a bigger ethical/moral question.” – UP 19

These sentiments point to an obvious barrier of speciesism which arises as councils attempt to provide amenity for dogs in parks. In considering speciesism in public open space planning, it is important to identify amenity for dogs is also amenity for dog owners, so decision-making which demotes dogs as a species also demotes dog owners as a user group. In other words, speciesism in this context reflects a stance implicit in decisions which prioritises human uses of public open space ahead of alternative uses which include dogs. These considerations are reflected in the accounts of the following planners:

“Now, at a species perspective, bringing power relationships in, from a species perspective: I’m putting my money into kids. I’m not putting my money into dogs. I’m not going to protect them from the dogs, the dog owners have to actually take responsibility for their dogs and keep them away from the kids.” – OSP 15

“If you were to prioritise all of those issues, the amenity of dogs probably features quite low on that list when compared with all the other impacts that we’re supposed to be considering as we progress a planning scheme amendment or piece of strategic work, and that’s probably one of the biggest reasons why it’s not given much attention.” – UP 19

There is no rational way to contrast a perspective which implicitly prioritises human uses ahead of dog uses with a perspective which prioritises the sharing of public open space between all uses. Planning is values-laden and planning for dogs in public open space is no exception. Such philosophical bases will permeate plans and actions such that human interests will always trump those of dogs. When dogs do break through this barrier, it is because humans have permitted that to happen for whatever reason. It is the choice of humans whether dogs are admitted or not into the planning of public open space.

Allocation of less desirable land for dog uses

Secondly, the allocation of less desirable land for dog uses presents a barrier to the allocation of public open space for dogs. The routine allocation of ‘runt space’ for dog uses is an overt demonstration of speciesism in planning public open space in practice. ‘Runt space’ is the urban backwater which humans find of relatively low amenity for human uses, these spaces are typically of little significance such as utility easements,

former garbage landfills (tip sites) and isolated tracts of land. The following accounts reflect a language of speciesism in favour of humans against dogs:

“I think we need to be quite strategic and find larger park areas that maybe could accommodate and this is where we’re starting to head in the idea of maybe some of our incumbent land, so Melbourne Water easements, not creeks and so forth, but other opportunities that we could use that could work quite well as dog spaces.” – OSP 16

“I know of a couple of areas of very underutilised parks and very large underutilised parks that could be modified fairly easily to accommodate dog parks and quite a large dog park and I actually think that that would be a direction to head in.” – OSP 16

“I think they found we need to put a dog park in. So I think our reserves people have gone out and found, if you like, the cheapest, most non-valuable piece of land and said, ‘Well, that’s a good spot for dogs’. And I think what was underdone was the level of usage of it: it was poorly drained; it was poorly sited to some degree. It’s got good access and parking, but we’ve had to go back now, and it was really a cheap option.” – AMO 21

“Let me give you an example of a dog park that’s not there but might be there. It’s a reserve that is... a former tip site. We have lots of difficult management issues to get around... This is a great spot for dog owners to go take their dogs for a walk; it’s not a highly used park.” – OSP 15

The public open space which is considered suitable for dogs is generally space which is in some way undesirable for human uses or inferior compared to alternative sites. Dog uses do not generally require infrastructure and only need to be located away from conflicting uses such as unfenced children’s playgrounds; with such little constraint and cost to establish, they can be situated in almost any public open space relatively easily. There is clearly a temptation to prioritise human uses where the facilities or amenity of a particular space is considered preferable to the community.

Not all public open space allocated for dog uses are located in runt space however:

“We’d identified several years ago that that particular area could do with more off-leash areas, so it’s a good opportunity to review it, to get... And the review was actually part of a utilisation strategy: What is this park? What does it mean to the residents? How can we get more use?” – AMO 8

“Often the shapes of the open spaces can be a bit hard to work with, but I think that what we’re saying with dog parks is that they can be accommodated in some unusual spaces more so than other elements.” – OSP 16

In the first example, AMO 8 describes a particular small pocket of open space that was fenced for dog use, the council seeing it as an opportunity to cater for dog owners in a particular park which was previously little used by the community. In the second example, OSP 16 describes an oddly-shaped, leftover space that was deemed unsuitable for other (human) uses which was opportunistically allocated for dog uses. Whereas these spaces do not suffer the same locational disadvantages of other runt space, they nevertheless remain somehow inferior.

Once space is allocated for dog uses, be it runt space or not, dog owners exhibit a strong reluctance to lose that amenity. Dogs and dog owners appear to accept any allocation of public open space and seem much less sensitive to that space's amenities, condition or location than other user groups:

“Not a lot of reason to visit that site, so you're essentially maintaining a very large open space for very few people... When you look at its location, it's stuck between a [highway] and the urban growth boundary, and it's quite isolated. So you would have to drive to this site... I'm not quite sure what to do with that site, but it's catering to quite few people and it's on a tip site. You know you're not going to be able to sell it off, and the dog people would be very upset if you got rid of it.” – OSP 26

“The community now have a high level of expectation. This facility's made available, so they had to close it for a period of time to put in subsoil drainage systems to try and effectively drain what was, you'd argue, an inappropriate piece of land.” – AMO 21

These accounts hint at the subservience of dog owners in relation to other users of public open space, where other users are arguably more discerning in accepting certain spaces for non-dog uses. This observation supports my contention that a species hierarchy exists in the planning of public open space.

Human agency and planning of public open space for dogs

Thirdly, human agency presents a barrier to the allocation of public open space for dogs. Human agency plays a role in the planner's decision to allocate space in favour of dogs. Runt spaces are often assigned for dog uses and, in fairness, these spaces may well satisfy the innate needs of dogs (whatever those may be). Dogs may not mind a space which is poorly sited, has drainage issues or is strewn with overhead transmission cables; however, we as humans are ill-equipped to know if a dog is happier in one space over another similar, equally safe space (see Chapters 3 and 6). In other words, the

decision to allocate these inferior spaces to dog uses is manifestly exercising speciesism.

Human agency is closely related to speciesism, where we are assumed to attend parks with dogs principally for our personal pleasure with the dog being an impetus for going to that space, an accessory which accompanies us when we visit that space or the like. Under this premise, ultimately public open space is designed with humans in mind and the dogs perform a different, subservient role. In particular, planners making decisions to assign dogs the ‘runt space’ which humans do not otherwise use are relegating dog owners as a community stakeholder to a lower class of public amenity. As a counter-argument, dog owners also enjoy public open space in a human way equally alongside non-dog owners; however this assertion promotes the dog owner’s other activity, e.g. formal sports use, as having a greater importance than that of what might be their more frequent, everyday activity of dog-walking.

The same phenomenon of human agency is noted in council discussions of ‘dog parks’, a particular kind of fenced off-leash public open space where there is an explicit expectation that the park is primarily for the use of dogs, unlike other parks which are primarily for the use of humans (see also Chapter 2). The following enthusiastic accounts describe dog parks in different settings:

“Can I just say one of the other things from a couple of other councils that I’ve spoken to that have probably in the last five years introduced dog parks, they said that one of the other main benefits of introducing them is the social side for people. So you come back to your urban park providing for the human side, they have found that it’s been a huge factor on becoming quite a social gathering point for people with dogs, so they’ve seen a huge benefit in actually drawing people back into parks by providing dog areas for them. So they’ve seen that as a secondary benefit, but it’s almost outweighed the original reason for why they put them in, they said, the demand from that perspective.” – OSP 16

“But they [dogs] are not the highest [priority], but they’re sort of not forgotten. I think as I said before, we’ve changed our perspective on them [dog parks] because they are community meeting places. And [on] dog areas and dogs, I think if you looked at the population per capita and how many dogs there are and how many animals people have...” – OSP 20

“...if I have to keep my dog on the leash or even if I have to watch my dog every second, I’m not going to be able to have such a... or be able to have my cup of coffee and my conversation. So it’s good...” – AMO 9

The shift in views identified by these interviewees hints at an underlying transition in the value which society places on dogs. The appetite for dog parks in those municipalities has increased not because of the benefit they might bring dogs but rather because of the benefit they bring to humans by way of their dual function as a community meeting place. This demonstrates that even parks which are ostensibly designed with dogs as a priority user are planned for by reference to human rather than dog needs, supporting my assertion that human agency plays a fundamental role in the planning of public open space for dogs.

Primacy of human uses in public open space

Fourthly, the primacy of human uses in public open space presents a barrier to allocating public open space to dog uses. In speaking about runt spaces earlier, the interviewees' accounts reflected a language of speciesism in favour of humans to the detriment of dogs. The actions of councils in allocating public open space in favour of dog uses also reflect similar notions, where the primacy of use of public open space reflects the focus of that space serving human needs. Dogs rarely command the primary use of a site and other uses, particularly formal sport uses, eclipse dog uses when conflict arises as the following interviewees infer:

“Dog usage or off-lead isn’t sort of a high level feature as the absolute primary use of the space, but it’s a certain use that will either have legitimacy in some areas or not in others, or different scales of use.” – OSP 13

“Sport’s a primary [use]; anything, whether it’s dogs or anything else, that affects sports [use] in a negative way, would be secondary.” – OSP 13

“Therein lies the theme, for 16% of the time, and we have that conversation with our leisure guys about how do we ensure those facilities are multi-use. And our leisure guys are very strong that they agree they should be multi-use; but when it’s being used for sport, it’s being used for sport.” – OSP 15

“There’s a whole range of different sporting clubs wanting access to open space sites and sometimes they’re not able to be operating on the same site at the same time or even sharing that facility long-term. So it’s about trying to balance all those potential user groups and finding a scenario that best utilises that open space and finding sometimes it is important to move groups on or find different opportunities for them to try and balance those needs.” – UP 22

These interviewees describe an implicit hierarchy of uses of public open space where formal sports is elevated and other uses are accommodated around the fixed requirements of those activities. The allocation of primary uses is a careful decision

which has long-term ramifications for the site and the community; decisions to allocate public open space to dogs prove no exception.

Earlier accounts from interviewees at the beginning of this section established that dog parks are desired by dog owners as safe places where they can recreate with their dog and once installed, they tend to prove popular; however, councils remain prudent and cautious when considering allocating public open space with a primacy of use by dogs:

“And I think that the idea of a fully-fenced dog park is reasonably new and this council doesn’t move that fast you know so it just hasn’t been an issue... I’ve never had any community member come to me saying they want a fully-fenced dog park. I’ve seen no correspondence, emails, phone calls, nothing.” – AMO 9

“We’re looking into it, so we’re at that sort of exploring stage and trying to build support for that. So we’ve recognised the benefit and we’ve had community consultation where people have asked for it, but it’s not a burning need but it’s something that we think could... that the community might enjoy, so we’re looking into that at an officer level.” – OSP 1

In part, I attribute the hesitancy to allocate public open space for dog uses to the reluctance of dog owners to relinquish space once it is allocated, underscoring the political nature of planning for dogs in urban environments. The installation of dog parks is not always practical and does have philosophical objectors. Accordingly, the following accounts illustrate a range of justifications for not allocating primacy of public open space to dogs:

“It wouldn’t be a type, a primary function, you wouldn’t categorise it. It’s a use, but you wouldn’t put it in a category by itself because dog-walking can occur in a whole range of different types of open space... It might be functioning as a multi-level sporting reserve, but its user groups are kids, dog walkers... How they use that space, there’s a whole range of user groups... So they are a user group as opposed to a function, although unless you develop a dog park up as a function...” – OSP 26

“I wouldn’t want to see a whole park fenced off for just dogs. We don’t have that luxury for having that space.” – OSP 16

“To me a dog park is quite specifically designed, has lots of requirements, but is there any shared use functions that a dog park can be used for other purposes, and other purposes can be used as a dog park as well, rather than simply just fence it? Because when you think about the design of a dog park and you fence it off, it’s quite specific and it’s not realistic to just design a park for a dog.” – OSP 18

“It’s fenced, and it’s an off-leash area, but it’s not fenced for dogs for an off-leash area.” – AMO 7

“Really your open space planning that you’re alluding to, your connections of parks and reserves, is important because it provides... You can add in your human users but you can also add in your human users that have the additional member of their family, which is pets.” – OSP 20

These accounts justify the optional nature of dedicated dog parks to cater for the needs of dogs (whatever those may be). Dog-walking is identified as an activity which can happen in parks and also in other parts of the public realm, so the need for a park especially for dogs is not required (see also Chapter 11). This is similar to other accounts that describe the dedication of parks to function for dogs as ‘luxurious’ and ‘unrealistic’. The distinction between fenced, off-leash parks and dog parks is a semantic exercise that linguistically limits the primacy of uses to exclude dogs on the presumption that fencing is exclusionary which, along with the other accounts, demonstrates an explicit ‘othering’ of dog owners and dogs in compartmentalising and prioritising human uses ahead of dog uses (fencing is discussed in section 12.3).

Perceptions of nuisance and maintenance burdens of dogs in public open space

Fifthly, the perceptions of nuisance and additional maintenance costs associated with dog uses present a barrier to the allocation of public open space to dog uses. Dog parks are usually located on less desirable land (‘runt space’) so that human-focussed activities can take place in more attractive locations. This is perhaps arising from a belief that dogs cause excessive wear and tear on parks compared with other uses, for example these accounts:

“Dogs place high demands on the public realm; they are clearly an ongoing design, management and maintenance issue.” – City of Stonnington (2010, p.79)

“It’s not just poo, they might dig holes which is a trip hazard for people, it’s hard to maintain the park if it’s dug up and there’s a number of issues around maintenance.” – OSP 14

“We’d rather they dig holes and poo on a dog park than on an active open space, just because of the sheer cost... a footy oval costs us about \$1 million to construct so we don’t really want dogs ripping it up.” – OSP 16

One reason given by planners for excluding dogs from some spaces is that dogs cause excessive wear and tear to public open space. Dogs can also cause a number of other nuisances in the community, including barking, odour, dog litter and providing unwanted attention. These are usually minor in that they rarely cause any ongoing health or safety concern, however if left unchecked they can escalate into a problem

which needs to be addressed. These nuisances however do contribute to a negative sentiment towards dogs in the community. Dog litter and, in particular, dog litter on sportsgrounds is a very common example of a minor nuisance which affects the broader community's enjoyment of public open space, as illustrated in the following accounts:

"It's more just the damage they do to our ground and I guess the level of maintenance we have to keep our sports fields to don't really complement dog use because the damage they could do, create potholes, and clubs don't like the idea that when they arrive they have to do basically a 'poo patrol' across the grounds and so forth." – OSP 16

"They're at a sports event for their children and people are combining that with walking their pet, so they decide to let their dog... go for a run and the pet runs out onto the sportsground or drops poo everywhere. So, it's when people have conflicting needs and they stop being responsible pet owners, that's when the conflict occurs." – OSP 1

Dog litter on sportsgrounds in particular is seen to generate conflict between dog owners and the other users of the sportsground. Where most other users are treated as individuals, dog owners are treated as a collective; in other words, dog owners appear to need to meet a higher standard of collective responsibility than other users of public open space. To the aggrieved community, it is dog owners as a collective that cause a nuisance of dog litter, even if it is only a subset of this collective that actually causes the nuisance. Dogs and their owners are then sanctioned as a group for the behaviour of a subset of their group. Whether this is a result of anthropocentrism or basic stereotyping of an otherwise ordinary group of people cannot be ascertained.

The perception that dogs cause wear and tear in excess of other human user groups is not universally held however. The following interviewees provide a contrast to the more typical accounts of earlier:

"I say, 'I never see dogs digging in a park when they're playing. They don't dig, they're happily playing'. And so then some of the park people who maintain the parks will tell me that the reason the park looks so bad is 'cos there's so many dogs on it and they dig, they've been digging up the park. Dogs don't dig in the park!" – AMO 9

"But even when the school uses sporting grounds, the clubs are unhappy about it because the schools wear it out." – UP 23

“That’s why we don’t like [council ovals] being co-located with them [schools], because DEECD [Department of Education and Early Childhood Development] don’t supply enough land in order to have enough open space to provide for their breakout space and their curriculum needs. They come and cannibalise our open space that has a usability life of 24 hours a week before it starts degrading. So the community suffers because the schoolkids spill out into the reserve... Because they tend to congregate around goal ends, they don’t evenly wear a field. A dog will, they’ll fertilise it too.” – OSP 11

AMO 9 observes that the open space planners and animal management officers differ in their perception of dogs and how they behave in parks. On the other hand, OSP 11 introduces the use of ovals by schoolchildren as causing much greater wear and tear than dogs. Nevertheless, the widely-held perception that dogs make a mess of parks and consequently impede the enjoyment of those parks by other users provides a strong argument for the typical council practice of diverting dog uses to less desirable parks.

Perceptions of exclusivity of public open space where dogs are present

Sixth and finally, some in the community perceive that dog uses are to the exclusion of human uses in public open space. The allocation of runt space to dogs makes an effective assumption that where dog use is the primary function of a park, that is to say the park is a dog park, it cannot be used by others, that the dogs gain exclusive rights to that space. Unlike some formal sports facilities which often do have restrictions on access to space when those activities are taking place, dog parks themselves are not exclusive to dogs or dog owners by their construction. In practice, dog parks are primarily used for dog uses to the exclusion of others in the community, however it is those other (non-dog) users in the community that actively choose to exclude themselves from the space on the basis that dogs are using the space, thereby making the space exclusive through their own actions and decisions. In other words, the perception that dog parks are exclusive is real however it is fundamentally a problem manufactured by the very people who feel excluded. These accounts illustrate this phenomenon:

“So then you come into discussions about ‘this isn’t just for dogs: people can go in there as well’. But it’s like, ‘Would you go into an area that was fenced off for dogs if you didn’t have a dog and you just wanted to hang around?’ Probably not.” – AMO 9

“There’s the fear that dogs cause and the reduction in amenity that people won’t go to places because they’re afraid that people will have dogs there. Suddenly it’s a dog park and the people who used to sit there and read the paper can’t be bothered with dogs sniffing up their jumper, things like that.” – DEPI

The apparent exclusivity of the dog park is a manifestation of the broader community’s ‘othering’ of dogs. The exclusivity is borne from a human desire to occupy a park without dogs. Dogs are the only species typically brought to a park on purpose by humans and as such dogs which occupy a park are there as a result of human actions; dogs are ostensibly not part of nature in this context. If dogs are brought to certain parks more than others, for example dog parks, then humans that do not wish to associate with dogs may choose to exclude themselves from that environment. The perceived and real exclusivity of dog parks results from the ‘othering’ of dogs by those who feel excluded.

The perception of the community affects the amenity afforded to dogs in public open space. The perception of dogs is deeply linked to community norms, the set of collective values. Just as in the case of some humans, there are dogs that do not behave in a way that is respectful of these values, generating a negative perception of dogs and dog owners in the community. There is certainly a moral argument to be had over whether it is fair for dogs to be stereotyped in this way; in contemporary times in Melbourne, we would not tolerate such labelling of humans by race, caste, gender or other such attribute that is completely outside of individual control. Species is treated differently in practice, however. The perception of dogs does matter to how amenable a community is to provide both dogs and dog owners with additional amenity.

Public open space is clearly contested by a number of different user groups, some of which are inherently conflicted. One recurring theme throughout my discussions with planners has been the need to manage the interaction of dogs and children in public open space. Fencing is a common solution employed by councils to manage this and other conflicts; indeed, fencing is a controversial topic in its own right. There is a lack of consensus on whether fencing of public open space improves or detracts from amenity, whether that be fencing for the benefit of children or fencing for the benefit of dog owners and dogs. Fencing introduces various complexities which ultimately question the legitimacy of use of public open space and is the subject of discussion in the next section, the final section of this chapter.

12.3 The decision to fence public open space for dogs

Finding 16: Fencing introduces dual interpretations of open space:

- Inclusive-Exclusive dualism: On the one hand, fences may make open space more inclusive as they allow a number of otherwise conflicting activities to take place simultaneously. On the other hand, fences may make open space feel exclusionary as they segregate particular spaces for certain activities to the actual or perceived exclusion of all other activities.
- Accessibility dualism: Fencing demarks nature from the urban and affects the flow of open space. Fencing can make a park more desirable, improving the accessibility of the park. However, fencing can be perceived as artificially cluttering the natural environment, making the space less desirable and consequently less accessible.
- Compliance dualism: Fencing increases the amenity of a space for dog owners that desire fenced areas to exercise their dogs with fencing being seen as a reward for responsible dog ownership. Fencing also encourages some dog owners to become less vigilant in compliance, in particular relaxing the requirement to keep their dog under effective control, thereby encouraging irresponsible dog ownership.

These dualisms allow the planner to pause and reflect on where they stand on more fundamental questions of speciesism and planning for dogs, allowing them to plan for dogs with greater mindfulness.

Fencing is an important treatment available to councils to help manage conflicts between incompatible uses of public open space. Fencing is implemented often with reluctance; however the attitudes towards fencing vary between open space planners:

“It’s never the ideal. We try to keep everything fence-free.” – OSP 4

“Fencing is done sparingly and only when there are no other ways to restrict.” – OSP 11

“I don’t particularly mind it [fencing for dogs] if it means that... it needs to be enclosed anyway because of the playground. We normally enclose our playgrounds to stop little kids running off. So I don’t particularly have an issue with that.” – OSP 20

The question of whether to fence or not to fence public open space will be explored through the words of the interviewees and the actions of councils. The decision to fence public open space is complicated and contextualised with a diversity of views expressed by interviewees and councils. Three dualisms emerged from the interview accounts as spectrums along which interviewees and councils position when making their decisions to fence or not to fence:

- Inclusive-Exclusive dualism
- Accessibility dualism
- Compliance dualism.

More generally, these dualisms offer insight into the consideration and treatment of dogs in the planning of public open space.

Inclusive-Exclusive dualism

As with the allocation of space for dogs, fencing of open space for dog uses is primarily for the benefit of dog owners rather than ostensibly satisfying an innate need of dogs. The amenity of fencing in this case is perhaps more focused on the needs of the dog; however it nevertheless remains fundamentally an accessory for the dog owner to improve the amenity of the park *for them*.

Planners interpret this amenity in different ways. On the one hand, fencing is inclusive of potentially conflicting uses and encourages the sharing of public open space among different user groups. However, fencing is exclusive of different users as it segregates particular activities to take place in certain areas to the real or apparent exclusion of others. The scheduling of conflicting activities at different times can act as an alternative to fencing, nevertheless introducing the same dualism. The following accounts illustrate some of this diversity of thinking:

“There’s a definite need for dog parks, it serves a certain part of the community. And then there’s also that if an area of park is taken up for this particular use, what does that do to the rest of the park and how does that function?” – OSP 6

“There are people who do not think there should be a dog park at *** because it alienates public open space. So if you’ve got a park that’s this big and you put a fence here that’s for dogs, that means... the rest of the community has to walk around that and it limits the amount of space.” – AMO 9

“What I think we need to do is assess our needs because we have limited open space and there are competing needs, there still should be places where we can take an animal where there aren’t those competitions or dual uses.” – AMO 8

“Some areas we do have just leftover bits of land which are all enclosed. What we need to do is minimal infrastructure upgrades; put a fence on the end of it, and it becomes a dog off-leash area. So that’s one type of space we’ve created.” – OSP 20

Planners that view fencing as undesirable describe its effect as ‘limiting’ and ‘alienating’, implying that fencing reduces the freedoms of humans and access to amenity. Conversely, other planners view fencing as presenting opportunities to include dogs in a space where they would otherwise conflict with other uses.

The exclusivity function of fencing open space is prevalent when planners speak about fencing open space for children. The anthropocentricity of planning unashamedly places emphasis on the welfare of children over and above the welfare of dogs. My interviewees never spoke in tones which indicated that fencing play areas for children makes those areas exclusive for children (which it essentially does); rather, they refer to fencing as providing for the welfare and safety of children:

“I think there’s one or two other areas where there are main roads and there’s an open reserve or space right there. So what they do is they put a fence up just to stop... not for dogs but more for children... running onto a road, on a busy street...” – AMO 7

“The fencing of playgrounds, that’s going ahead. But the fencing of actually [an off-leash] park, absolutely not.” – AMO 5

“We normally enclose our playgrounds to stop little kids running off. So I don’t particularly have an issue with that.” – OSP 20

“They often ask for playgrounds with fences around them... The highest number of requests that we have for fences are from parents. They want their children protected. And then the second highest are from dog owners, they don’t want their dogs to run out onto the roads. But priority first is always children.” – OSP 4

As with fencing for dog uses, the fencing of playgrounds blurs the boundary between exclusion and inclusion, where the fence allows children opportunities for safe play (inclusion) yet excludes others effectively or, in the case of others with dogs, absolutely. On the other hand when fencing is thought of as inclusive rather than exclusive, it is viewed more positively by planners. Fencing is seen as enabling the sharing of space to take place where activities would otherwise conflict, the role of fencing in this context being to partition rather than exclude:

“So you’ve got to sort of consider: Do you want to put everything in a box? Do you want to put all sporting people together? Do you want to put all the dog people together? Or do you want the park to function as a space that everybody can use? And it may have some conflicts; you might have to deal with fencing along part of it.” – OSP 26

“We don’t have a lot of land in *** to be honest, but there’s small pockets in small parks where we’ve found you could fence off a small area, but then investigate a dog park as more of a municipal or regional destination, attract a broader section.”
–AMO 21

“We have draft plans that show potential dedicated dog off-leash area, fenced and controlled. It still means that there’s enough space there for that to occur in conjunction with other things on that site. And it actually fits in with the existing use of the park as well. But we fence that particular one so all the other uses can occur at the same time as this particular one can occur.” – OSP 15

“We need to have the fence because often parents will have the families with the pets as well and they’ll come together.” – OSP 4

The perception of whether fencing is inclusionary or exclusionary appears to follow the ontological inclinations of professions (see Chapter 8). Most open space planners in my study find fencing to be exclusionary and moreover to the exclusion of humans rather than facilitating simultaneous multiple but conflicting uses of open space. Conversely, animal management officers have more diverse views of fencing; they perceive fencing as either inclusionary or exclusionary and, where it is exclusionary, they tend to view that exclusion as exclusion in favour of dogs rather than exclusion to the detriment of humans. These ontological delineations are further explored in examining the accessibility dualism.

Accessibility dualism

The accessibility dualism is closely related to the inclusive-exclusive dualism: Whereas the inclusive-exclusive dualism focuses on activities (the ‘what’), the accessibility dualism focuses on values (the ‘why’). The accessibility dualism is based on the premise that fencing can make public open space simultaneously more and less desirable. Those which view fencing positively do so as fencing encourages them to use the open space more than they otherwise would, i.e. fencing increases their personal freedom. Conversely, those which view fencing negatively perceive fencing as making the space more cluttered and perhaps artificial, changing the natural dynamic and flow of the reserve and making the space less desirable, thereby restricting their personal freedom and exacerbating any pre-existing perceptions of exclusivity.

As with the inclusive-exclusive dualism, the following accounts of open space planners show a general view of fencing as limiting freedoms, using words like ‘diminish’, ‘restrict’, ‘segregate’ and ‘enclose’ to describe the outcome of fencing public open

space. Fencing is perceived as exclusionary of nature, making the park less open and ‘jungle-like’, and exclusionary of park users that desire a freely flowing, natural park experience rather than having activities in ‘boxes’:

“I don’t agree with fences either and I think there are other issues against them. It’s a very simple, easy option putting a fence up to try and allocate space, but it means you lose the whole effect of the reserve and any sort of natural environment you have... Fencing then creates an artificial barrier between the public and private realm. Open space is supposed to be a public resource. There’s a lot of value it delivers from an amenity and streetscape perspective and an environmental perspective. Open space should be open for anyone to access and putting a fence up diminishes that value and... it’s closing off and restricting access to a public asset.” – OSP 13

“Ideally, we’d like to get them to blend together. From a design perspective, the fences are not the best way to segregate those spaces. But they just come up as a real high-demand item especially families with young children. If you have dogs and a playground, they always want them segregated... We try to limit the amount of fencing that we use because it just makes the space seem so much enclosed and we want to keep it open, keep it integrated with the rest of the surrounding areas.” – OSP 4

“Open space is a precious commodity. *** is relatively well supplied with open space, and we state that in our open space plan. It doesn’t mean we’ve got enough space for things that people like to have in little boxes.” – OSP 15

“Generally [the ideal solution] tends to be not fencing, because to provide that openness as open space, as opposed to be an excluding element. It’s just a park that people can walk in.” – OSP 6

“In some of these smaller parks, you don’t want to start fencing it off. It’s going to look like a jungle of fences and so forth.” – OSP 16

The interpretation of freedom is utterly dependent on whom the subject of that freedom is. In the case of partitioning open space, it can be interpreted as inclusive in terms of encouraging multi-use of open space but also as restrictive in terms of not sharing that space with other uses. In other words, the stance on partitioning open space depends on both the extent of harmony between contesting users and uses and the desired accommodation or exclusion of conflicting activities.

Fencing is also very expensive relative to other (imperfect) substitutes such as vegetation installations, rock formations and buffer space, for example:

“We’ve got an annual budget to increase planting so that’s a much easier resource to put in [than fencing], and very quickly as well... So we hit a lot of targets if we put in the greening, then we may be able to improve biodiversity because we have more permeable surfaces.” – OSP 4

“If you can do it with vegetation or rocks, in a natural setting... [Fencing is] brought up with playgrounds next to major roads. If there’s no other alternative, well then we’ll fence but we’ll probably only fence a portion of it, not the whole thing.” – OSP 11

Fencing has a substantial opportunity cost and councils do look toward cheaper alternatives which may function almost as well as fencing to improve safety, reduce conflict or encourage simultaneous use of a park. Fencing is also discouraged where the open space is large enough to absorb multiple activities with natural buffers of passive open space. The following account reflects on these perspectives:

“So some people don’t think dogs should particularly be on ovals because they wreck them and some people don’t think we should have a fully fenced dog park because it alienates everybody else. And then some people think we shouldn’t have dogs near playgrounds, but we don’t have such of an issue about that. I think somehow the issues have been resolved. Either there’s a fence around the playground which does happen, or it’s far enough away and it’s a big enough space that people are comfortable.” – AMO 9

The decision to fence or not to fence is clearly values-laden.

Compliance dualism

Particularly in smaller reserves, fencing alternatives such as vegetation or rocks are inadequate substitutes for fully-fenced reserves for owners that do not have effective control of their dog. Dogs are easily stimulated by new smells and movement and paradoxically may be encouraged to explore the very boundary which they are supposed to stay away from; given the boundary is porous, they may simply wander away. In other words, the vegetation has potentially increased rather than reduced the risk of accident for dogs which are not under effective control by their owners.

If fencing is viewed as an increase in amenity for dog owners, I argue that the provision of fencing must be theoretically independent of the level of responsible dog ownership. Fencing of public open space (whether it is for dogs or not) may be interpreted by the community as a reward to compliant dog owners and, conversely, fencing can provide an incentive for dog owners to become less responsible as they may perceive that effective control and surveillance of their dog is no longer necessary. These impacts

however can only be known after fencing is in place; the council cannot know ahead of time whether the fencing will have a desirable effect. The planner however may perceive the effect *a priori* as desirable (more compliant) or undesirable (less compliant), increasing or decreasing the planner's propensity to respond to community demands for fenced infrastructure for dogs. The provision of fencing for dogs is however independent of the actual level of responsible dog ownership in the community; rather it is dependent on the planner's perception of how providing fencing for dogs will marginally affect the level of responsible dog ownership going forward. This represents a compliance dualism.

To illustrate this dualism, some planners speak of the new opportunities which fencing affords the community:

"The minute we fenced it, it became a much more attractive area for dog owners. Now it doesn't mean, and this is hard for the residents to understand, that the people are any less attentive to their animal and under control, it just reduces the opportunity for the dog to get away and maybe get hit by a car." – AMO 8

"They want basically a safe area to let their dogs off lead because while the laws say if you're letting your dog off-lead... and there's plenty of off-lead activity areas... the reality is in training a dog to be that obedient, to recall, you have to practice somewhere and you need to let them off-lead in a safe space that you know they can't get out of. They can have socialisation. If they get a bit freaked out by other dogs, they'll run to the corner where you can catch them again, as opposed to running off into traffic at a park without a fence." – AMO 17

"People are going that are living in that area, they're walking down and they're letting their dogs run in this open area because you can throw a ball there, the dogs run around together, they're already using it for that purpose. And all I'm trying to do is to legitimise it and say, actually, if we put a fence around it, the dog won't stray anywhere... We don't want the species of fauna affected by dog's intrusion, whether it be platypus, or possums, or whatever the heck it is you're trying to protect... This actually segregates dogs from the areas you don't want dogs going. Whereas at the moment, I'd argue that people [throw] the ball here and then just walk and the dogs are running through the bushes anyway." – AMO 21

Fencing enables dogs to have particular access to the urban environment that would otherwise not be available to them. AMO 21 introduces the notion that without fencing, owners are less compliant. Others in contrast perceive a fenced environment as encouraging less compliance, with fencing posing a safety risk to the broader community due to a lack of effective control compliance from some dog owners. This illustrates a compliance dualism in practice.

Some planners contend that there is no need for fencing given that effective control regulations exist; that is to say, since a dog is required to be under effective control at all times, the function of a fence to prevent dog egress is redundant:

“It’s very controversial. I’m probably not a fan of it, in regards to fencing. From an animal point-of-view, if you need a fence to control your dog, then you shouldn’t have it off-lead because you’re selling the message that it’s okay not to have effective control of your dog in an area where even if it’s off-lead you still must have effective control of your dog.” – AMO 7

“I’m aware that other councils that have had those fenced off parks have actually removed some parts of the fencing or the gates so the dog then isn’t contained and can’t be used for that sort of purpose where the dog can just be put in there and left to its own devices.” – AMO 2

“That’s what people do, people become lazy because it’s enclosed. They’ll just sit on the park and just let the dogs do whatever they do, because still dog attacks can happen in that area.” – AMO 3

“If you are depending on a fence around [an off-leash park], you shouldn’t be having your dog off a lead.” – AMO 5

Earlier in Chapter 10, I argued that effective control regulations lacked practicality and enforceability. In continuing that argument here, I contend that effective control inadequately mitigates the risk of harm to the dog and the community should the owner lose control of their dog. Enforcing effective control in this context is after-the-fact and reactive, whereas fencing for dogs anticipates and manages the risk that any owner will occasionally lose control of their dog. My arguments are supported by the following interviewee in their detailed account of why fencing is necessary despite effective control regulations being in place:

“The other thing that’s interesting I think is that when I started saying to people we want to have a fully fenced dog park, there was a lot of debate about whether it’s needed because the local law says that if your dog is off a leash it’s meant to be under your control. So then the question comes why do you need it to be fully fenced because it is supposed to be under your control? ... That’s fine, but how are you going to find out if your dog is under control if you never give it a chance? And you could give it a chance and it could take off? Or what if you have a deaf dog? Or what if you have a puppy and you are wanting to see how it goes? Or what if you have a beagle and a lot of beagles can never be off a leash? There are dogs that are just never going to be able to meet that requirement. But this is a debate that I have with people quite a bit in council, not so much with councillors but council officers including the CEO, about why do we need a fully fenced park, because they’re supposed to be under control?” – AMO 9

Earlier in section 12.2, I established that off-leash parks and dog parks exist for the primary benefit of humans (dog owners) with any benefit to dogs being ancillary to satisfying human wants and needs. As humans, we habitually generalise and apply our own experience onto other species. Not all interviewees positioned themselves on the human-animal spectrum, however the three dualisms of inclusive-exclusive, accessibility and compliance help animal management officers, open space planners and urban planners navigate their own predispositions in respect to planning for dogs more generally. By being more aware of speciesism in their decision-making, they demonstrate respect for the needs and capabilities of dogs themselves even if there is no change in the underlying decision to fence or not to fence simply by planning with more mindfulness. This discussion culminates in the next chapter which provides an overview of both how urban planners consider dogs in their plans and why this may be the case, examining the words and actions of urban planners as they grapple with planning for dogs in an essentially human environment.

13. URBAN PLANNING FOR DOGS

Urban planners in Victoria are largely governed by provisions in the *Planning and Environment Act 1987* (Vic.) ('PEA') both in terms of how they undertake their role and what subjects fall within the purview of urban planning. Section 12A of the PEA governs the making of municipal strategy through the *Municipal Strategic Statement* and the *Council Plan*. If the subjects lie within the scope of the *Municipal Strategic Statement* and the *Council Plan*, then plans must be made. Drawing on the *Victoria Planning Provisions*, the urban planner then creates a set of planning controls within their council's planning scheme to implement those plans at a local level. Outside of these formal planning controls or inclusion in high-level municipal strategy, the inclusion or exclusion of subjects from urban planning's scope remains at the discretion of the individual urban planner and the broader urban planning profession. This chapter explores these decisions through the voices of urban planners and the words in the instruments of the Victorian planning framework to provide insight into urban planning for dogs in practice.

13.1 How urban planning lacks concern for dogs

Dogs are certainly not automatically included as subjects of urban planning:

"And I mean whether or not it [dogs] best sits within planning or strategic planning, I'm not sure. Aside from the open space stuff [which] definitely is a consideration, but I guess depending on what you're talking about, it doesn't necessarily sit within strategic planning or is something that we have control over."
– UP 19

This account is typical of most urban planners interviewed. A detailed examination of each council's written documents confirms that little substantial, positive consideration is given to dogs by urban planners and it becomes relatively safe to assume that dogs are not natural subjects of urban planning. This section¹¹ examines both the planning system and the accounts of planners to understand how urban planning lacks concern for dogs in practice.

¹¹ Note: The contents of this section have been adapted for publication in Carter (n.d.) (forthcoming).

The contemporary Victorian planning system and the subject of planning for dogs

The *Planning and Environment Act 1987* (Vic.) ('PEA') is the principal planning legislation governing urban planning in Victoria. Among other things relating to the establishment and implementation of the local urban plan, the PEA outlines the objectives of planning, providing guidance as to the practical reach of the discipline of urban planning. The PEA prescribes the planning scheme as the basic strategic planning tool adopted by all councils, with common provisions drawn from the state standardised provisions (the *Victoria Planning Provisions*, the 'VPPs') that are adjusted for the local strategic context, leading to an enhanced focus on both state and metropolitan strategy in establishing a local strategy (see Chapter 4 and Buxton, Goodman and Budge (2005) in particular). In considering whether urban planning can accommodate the subject of dogs, it is worth framing this in a broader overview of recent developments in planning.

At the time of its inception, the Minister for Planning and Environment articulated that the PEA was never intended to prescribe the role of an urban planner nor take account of every conceivable issue that might affect land use planning (State Government of Victoria, Legislative Council 1987); indeed at the time, the Minister specifically declined to define 'planning':

"There is no need for an Act to define 'planning'. It would be highly undesirable to try to do so, because the boundaries would inevitably be artificially constrained." (1987, p.492)

Section 4 of the PEA nevertheless states 'the objectives of planning in Victoria' as focusing on the use, development and protection of land. These functions are undertaken with fairness, orderliness, economic prosperity and sustainability in mind, balancing the needs and amenity of all Victorians presently and in the future. Importantly, these objectives have remained unchanged since the PEA's inception; it remains then to consider how the practice of urban planning has adjusted over time to accommodate new subjects and interests.

Over the 29 years since its inception (to August 2016), the PEA has been amended 77 times. Whilst this is perhaps reflective of the political interest in urban planning issues by successive state governments, there are a small number of key milestones which,

when taken together, trace the macro-trajectory of urban planning over this period (Table 20):

Year	Milestone	Enabling Act
1987	The <i>Planning and Environment Act 1987</i> (Vic.) came into force in Victoria	
1988	The <i>Subdivision Act 1988</i> (Vic.) came into force in Victoria, regulating the subdivision and consolidation of land and managing some issues of common property	<i>Subdivision Act 1988</i> (Vic.)
1996	Introduction of the VPPs and planning schemes which remain the bedrock of contemporary urban planning in Victoria	<i>Planning and Environment (Planning Schemes) Act 1996</i> (Vic.)
1998	The Victorian Civil and Administration Tribunal is formed, the tribunal for resolution of planning disputes	<i>Tribunals and Licensing Authorities (Miscellaneous Amendments) Act 1998</i> (Vic.)
2006/2013	The Growth Areas Authority was formed, tasked with planning in designated growth areas surrounding metropolitan Melbourne and, later in 2013, their remit expanded to encompass any designated area in metropolitan or regional areas	<i>Planning and Environment (Growth Areas Authority) Act 2006</i> (Vic.) <i>Planning and Environment Amendment (Growth Areas Authority and Miscellaneous) Act 2013</i> (Vic.)
2012	The introduction of streamlined VicSmart planning for straightforward applications	<i>Planning and Environment Amendment (VicSmart Planning Assessment) Act 2012</i> (Vic.)

Table 20: Macro-trajectory of the *Planning and Environment Act 1987* (Vic.) (source: author's interpretation of legislative records)

Since 1996, the VPPs and planning schemes have been an integral part of urban planning in Victoria, providing controls and tools for urban planners to design and implement their plans. Just as the planning system has evolved through the macro-trajectory of the PEA, so too have planning schemes as they adapt to changes in the urban planning profession and society more broadly (Table 21):

Year	Milestone	Enabling Act
1996	Planning schemes and the VPPs were introduced into the Victorian planning system	<i>Planning and Environment (Planning Schemes) Act 1996</i> (Vic.)
2004	Requirement for planning schemes to be cognisant of regional strategic plans	<i>Planning and Environment (General Amendment) Act 2004</i> (Vic.)

Year	Milestone	Enabling Act
2009/2013	Development Assessment Committees established to review activity centre planning with strategies at that time promoting concepts like the 'multi-centre city' (State Government of Victoria 2008). These were superseded by Planning Application Committees in 2013 which would review planning for any applications as referred to by the Minister	<i>Planning Legislation Amendment Act 2009</i> (Vic.) <i>Planning and Environment Amendment (General) Act 2013</i> (Vic.)
2010	Requirement for the Growth Areas Authority to consider land use and transport as objectives of planning	<i>Transport Integration Act 2010</i> (Vic.)
2013	Requirement for planning schemes and permit application assessments to take into account both social and economic effects of those plans (formerly 'may take into account', now 'must take into account')	<i>Planning and Environment Amendment (General) Act 2013</i> (Vic.)

Table 21: Evolution of planning schemes in the *Planning and Environment Act 1987* (Vic.) (source: author's interpretation of legislative records)

The VPPs which comprise the building blocks of planning schemes have undergone 100 amendments in the past 20 years. Over that time, the changes have focused on a number of areas including the natural environment and climate change, renewable energy, bushfire resilience, and social strategies particularly around alcohol and gambling, together with more traditional measures to implement metropolitan and regional land use and development strategies (based on my interpretation of State Government of Victoria (2016) records).

My thesis demonstrates that the subject of dogs encompasses both social and environmental planning effects. It is evident that environmental planning has gained traction with urban planners in recent years, particularly in managing the effects of anthropogenic climate change through policy and technology, however social planning appears to have only gained marginal traction in the formal planning system. Indeed as shown in Table 21, economic and social considerations were codified as compulsory as recently as February 2013 when the language in the PEA changed from 'may take into account' to 'must take into account' economic and social considerations when making a decision on a planning permit or when formulating changes to a planning scheme (sections 60(1)(f) and 12(2)(c) of the PEA respectively). Urban planning both evolves and has the capacity to accommodate new subjects from time-to-time. With the

contemporary interest of urban planners in both environmental and social planning, there consequently remains scope within urban planning to accommodate a new subject of dogs.

Barriers faced when planning for dogs in practice

Despite the possibility for adaptation and change afforded by the Victorian planning framework, interviews with urban planners established that dogs are generally excluded from urban planning's concern. Accordingly, planners provided a relatively long list of reasons why this might be the case with considerations ranging from the practical to the philosophical and moral. These reasons will now be explored through the voices of urban planners to understand how planning for dogs takes place, or not, and reasons why this may be the case.

Firstly, urban planners appear to consider their profession to be largely overburdened with responsibilities. There are many issues which now 'weigh into' urban planning fora, such as open space planning and social planning, which some urban planners maintain lie outside of planning's remit. If the profession-at-large already feels overburdened, it is difficult to expect that planning for dogs would receive wholesale buy-in from urban planners, for example:

"But a lot of other disciplines, particularly open space at a state level and social issues, are quite envious of the planning system because it gives a very clear framework, well some would say not, but it actually gives a whole lot of issues a home in terms of how you should deal with them and the path you should follow, where other discipline areas like open space or like social planning issues or social issues don't have that clear framework and it's a combination of all sorts of things, all over the place, that you have to use to get to a decision. So that's the issue. Unless it's going to inform a specific planning decision and we have a discretion to deal with it, it's not really something that should be in there." – UP 13

"I think that's probably the reason why it [dogs] doesn't feature highly on our list of things to consider in the sense that there's so many... It's prescribed in the Act what we're supposed to consider, and it's sort of like social impacts, economic impacts, those sorts of things... environmental... I guess once we consider all the things we need to consider when making a decision or rezoning land, if you were to prioritise all of those issues, the amenity of dogs probably features quite low on that list when compared with all the other impacts that we're supposed to be considering as we progress a planning scheme amendment or piece of strategic work, and that's probably one of the biggest reasons why it's not given much attention." – UP 19

These interviewees speak of dogs as the ‘other’ in urban planning. UP 13 opines that urban planners will only consider dogs if they “inform a specific planning decision”. If planning for dogs does not presently take place, then planners cannot consider dogs as subjects of planning by construction. UP 19 speaks of dogs as lacking priority for consideration by overtaxed planners. In other words, dogs are manifestly outside planning’s concern.

Urban planners speak of planning scheme controls as the same as them having control. The planning system is governed by inclusion in and exclusion from the planning scheme, with planning that takes place outside of the planning scheme construct having a second-tier status, being of local importance and somehow unworthy of more systematic attention. The PEA nevertheless states ‘the objectives of planning in Victoria’ in section 4 – as primarily controlling the use, development and protection of land – these directing urban planning’s attention towards these subjects (and consequently away from others). This emphasis relegates subjects that are not directly related to land use and development to suffer more arbitrary attention, despite the subjects perhaps being of relevance to urban planning in a broader sense. The PEA has a substantial influence on urban planning in practice and the limitations it introduces are a common defence employed by urban planners in arguing against the inclusion of dogs within planning’s concern:

“It really depends on the process. Obviously if something is in the planning scheme, the objectives in the planning scheme need to be planning-based objectives. So there’s a limitation on the scope of them, but you know theoretically the planning scheme needs to align with the *Council Plan* as well, you know from the big picture down to the more detailed. But at the end of the day, the planning scheme’s really just managing land use and development, so it’s got a limited sphere of influence effectively.” – UP 22

“So, whenever we prepare an amendment, as part of the explanatory report, I think it’s written into the Act or there’s a practice note or something, there’s strategic assessment guidelines which is a series of questions we’re supposed to answer based on those bottom line principles which, once answered, should demonstrate why... should provide the justification why the amendment should proceed, why it is sound planning and how it is justified, that sort of thing.” – UP 19

Dogs lie outside of urban planning’s concern and are excluded from the planning scheme as dogs do not generally feature in concerns of land use or development or in the broader *Council Plan*. It remains however that the intention of the PEA was to

allow it to accommodate new subjects of planning rather than constrain the scope of planning; nevertheless, dogs fail to satisfy the objectives of planning in Victoria which makes their consideration by planners as subjects of planning in their own right very challenging.

Since planning outside the planning scheme is prone to inconsistency, for an urban planner to effect systematic change they need to proceed through the planning scheme amendment process. This may require amending the VPPs, with such an amendment having a potential flow-on effect across all councils in Victoria. Such changes do happen from time-to-time, but they are usually part of a larger program driven by the Victorian government and unrelated to individual councils; it is probably unrealistic to expect such uniform, state-wide concern for dogs, at least in the short-term. On the other hand, any changes to individual planning schemes need to reflect local conditions and idiosyncrasies; this presents new challenges in that planning issues around dogs are unlikely to be so localised to be special to ‘this location’, to the exclusion of all other locations.

In the absence of a state-wide consensus or priority, of which there is currently none, almost all planning for dogs takes place outside of the planning scheme and therefore almost all planning for dogs suffers from a lack of control, consistency and oversight which would otherwise be offered by the formal planning scheme construct. Outside of the planning scheme, urban planners have greater power to effect the changes which they desire to the urban environment; however they themselves appear to resist change:

“Look generally... I’m sure there are exceptions where you don’t change anything, but when we talk about strategic planning, quite often it’s not as proactive as we’d like to think. Often it’s responding to pressure that’s built up or changes the state government is making and so forth. So there’s often a need.” – UP 22

“It’s also whether it’s fact or fiction, or whether it’s saying something to advance a position, or advocate a certain position to get an outcome. If we get 1,800 submissions that there’s a problem, you’re going to have to do something about it and there’s a problem, whether there is or there isn’t, whether the fact actually matches what is actually going on. Like strength in numbers to pursue a certain outcome.” – UP 13

That strategic planning is “quite often... not as proactive as we’d like to think” (UP 22) aligns with a critically reflexive practice of urban planning in Victoria, where it acts in a largely reactive way to the community’s voices and takes account of those voices of

deliberation in a rational way. There is a language of forced behaviours, where in response to ‘pressure that’s built up’, urban planners feel that they are ‘going to have to do something about it’, according with urban planning as being a mostly static enterprise in Victoria despite the broader shifts in the scope of urban planning over time.

The pressures to which urban planners respond often come from the community. Nevertheless, urban planners hold the keys to the planning system and planning is not an easy process for the general community to effectively participate in. The following accounts reflect the difficulties that urban planners experience in engaging with the community at the right time in the planning process:

“It would be great as a system if people understood that their biggest contribution... if people got involved more in the big picture stuff... And you’ve got to have a wide vision of what you want and it’s not necessarily an easy system to understand... You know, like it’s not necessarily a quick process, and people are busy, and the system’s not necessarily the easiest to engage with.” – UP 24

“It’s certainly easier to engage with most community members at a more localised level so, if you’re doing a housing strategy, it’s going to be more difficult to get the community involved in something at that level, as opposed to doing a structure plan for a particular area, where people are familiar and that’s their neighbourhood. So they’re obviously more concerned with what’s happening in their immediacy.” – UP 22

The key stakeholder in the urban planning process appears to be the urban planners themselves and the process continues unencumbered irrespective of whether the community provides input or not. The onus is on the community to involve itself with the urban planning process and for that involvement to be at the right stage in that process. The process is less familiar to the general community; nevertheless, the process essentially requires them to know when to most effectively consult with the urban planning process despite lacking understanding of that process. Even when the community does engage, the process can be very time consuming, complex and perhaps uninteresting, these all working in concert to empower the planner. The more localised the impact of a proposed development however, the greater the incentive for the community to engage with the planning system.

My interviews indicate that urban planners often consider themselves as the experts in the planning system, this expertise directing planners to consider community positions

relative to preconceived normative ideal outcomes. Accordingly, the following planners describe a ‘filtering’ process to ensure that the outcome is not prejudiced by ‘vocal minorities’:

“We don’t really want a development happening that would just be bad... a bad outcome for the area.” – UP 25

“If you engage people and allow them to participate in a process so they understand the reasons why change is having to occur, you find they tend to come on board... It’s about making sure everyone’s included and filtering all of their ideas into an outcome that we achieve a net community benefit that may not be consensus.” – UP 22

“And I guess in preparing a plan and exhibiting an amendment, the primary focus is on net community benefit and sound strategic planning. So, I guess as officers we try and not be swayed by a vocal minority, but there is a role in planning as the negotiator, working between the different parties to try and come to that compromised position. Not to the point where the mediated outcome is a bad planning outcome, but sometimes in order to get a project through, there might need to be concessions made.” – UP 19

These accounts infer that acceptable urban planning outcomes appeal to the vocal, mainstream voices of the consulted. Urban planners filter out ‘bad outcomes’ of the ‘vocal minority’ in the interests of ‘net community benefit’, taking on a utilitarian role in the spirit of rational planning. One interviewee describes deviations from the normative outcome as ‘concessions’, this alone emphasising the role of urban planners as driving the process to deliver their preconceived outcome.

Accordingly, I now reconsider the question of whether urban planning is a process- or outcomes-oriented profession in practice. Earlier in Chapter 8, urban planning was found to have a process ontology borne from the rational practice of urban planning within the confines of governing statutory processes and common protocols enshrined in the PEA and other professional norms. And so through these accounts, urban planners demonstrate that the set of controls inherent to the planning system represents their own control of that very system. Community consultation is a requisite input to the planning system at various checkpoints, these consultations potentially affecting the downstream process and outcome if left unfettered. The action of filtering helps the urban planner to maintain control of the planning process and consequently deliver their preconceived outcome. By filtering the community’s consultations, planners inevitably

blur the delineation between process and outcomes; process nevertheless continues to dominate the practice of planning.

The planning system may be driven by urban planners in practice, however the overall process of planning scheme amendment is governed by the scrutiny of the elected councillor-representatives, the Victorian government planning department officers and ultimately the Victorian Minister for Planning:

“Because before you even go through the amendment process, you go to council to get endorsement or authorisation from the Minister to prepare that amendment. So it’s sort of like a council decision to go ahead with [drafting] that amendment in the first place.” – UP 10

The scrutineer has the option of veto at each stage, returning the process back to the beginning. It appears from this that urban planning is highly asymmetric: that is, urban planners do not need to justify the continued exclusion of a subject from planning; rather, they need to go to sometimes extraordinary lengths to justify the inclusion of a new subject. Planning for dogs proves no exception to this rule. In this account of planning for dogs, urban planners clearly seek to control both what is planned and, once planning is underway, the outcome of that process. The next section explores the reasons why urban planning as a profession lacks concern for dogs.

13.2 Why urban planning lacks concern for dogs

Finding 17: Urban planning in Victoria is a profession which considers itself largely overburdened from expansion of its original remit. Four sequential hurdles are encountered by planners in considering the inclusion of dogs as subjects of urban planning:

1. Speciesist hierarchy – consideration of human needs come first at all times.
2. Universality – not everybody owns a dog, so why should they be planned for?
3. Species ranking – at what point should interest in other species commence?
4. Human agency of dog owners – where the needs of dog owners are taken as a proxy for the needs of dogs.

Since dogs are required to meet more stringent conditions than humans in order to be afforded consideration by urban planners, in particular the need for universality, they are efficiently blocked from consideration by urban planners at any one of these hurdles.

In this section¹², I examine why dogs are excluded from consideration in urban planning. The position of dogs in society's hierarchy lacks community consensus: some people in the community love dogs, others hate them, some fear them, and yet others remain indifferent. Nevertheless some people will staunchly defend their values and object to the process of consensus-building, perhaps leading to a stalemate as recounted in the following anecdote:

““So why would you do anything different? If you did, you were wrong. So why are you looking for consensus? Because it's not what I told you to do.” – UP 13

This section will examine the extent and effect of such polarised views on the exclusion of dogs from urban planning.

Consensus and the field of concern

According to urban planners interviewed, the planning profession has many responsibilities with relatively few resources to execute their duties. In making decisions about where to allocate scarce time and resources, the planner must judge whether a particular allocation is worthwhile. These expressions of value create a range of planning outcomes that lack consistency, particularly where the subjects of planning are contentious. Such values-based planning is fundamentally non-aligned with the

¹² Note: The contents of this section have been adapted and published in Carter (2016b).

rational planning system, hinting at a profound ontological disparity between the subject of dogs and the process of planning. This disparity affects what planning is done (i.e., decision to include or exclude from concern) and how that planning is done (i.e., decision to act as a rational planner). Therefore, understanding how these values permeate planning is important to understand how planning for dogs take shape.

The consideration of what amenity is ample for humans and what amenity is appropriate to allow other species is extremely difficult to determine for an individual and consequently impossible to determine for a community. In practice, different needs are ranked and a hierarchy emerges, providing a window to observe how urban planners conceive society's 'greater good' in the context of planning for dogs:

"From a strategic, you know, CEO and executive level, they don't care... They would expect us to follow the correct process, but they care that the outcome is responsible pet ownership and that it's a great place to live for pet owners and their pets and for others; but in the case of our plan and our area... [that] it doesn't conflict with the liveability of other residents." – UP 1

"I'm not sure what the Act [PEA] says on this but whether the focus is on... I assume that the focus would be on people rather than animals and that sort of thing in terms of amenity." – UP 19

"I suppose it's only about... because obviously it's about liveability... sorry, it's more about people. In being healthy and in being all of these other things, the dogs might be an outcome of that, that they might have a pet..." – UP 24

Whether urban planners have an intention to do so, the fact remains that dogs occupy a lower position in this hierarchy than other subjects of planning. There is no clear community consensus on the inclusion of dogs as subjects of planning, indeed the subject of dogs is deeply polarising and lacks any 'middle ground', nevertheless this lack of community consensus appears to be of secondary importance to planners in their exclusion of dogs as subjects of planning; other factors appear to prove more compelling in practice (see section 13.1).

The urban planner is a gatekeeper who controls which subjects lie within their 'field of concern' and, most importantly, controls which subjects are excluded (Figure 8). The planner's role as gatekeeper functions within their contrived 'bounded rationality' constraints (as in Forester (1984)), however these typically act to exclude dogs; in other words, it seems there lacks an appropriate configuration of constraints that would accommodate dogs as subjects of planning. The gatekeeper function lies on an

ontological spectrum that describes what planning gets done: as shaping the planning system (gatekeeper) to practising planning within the existing planning system (practitioner). The epistemological spectrum on the other hand describes how planning gets done and parallels the ontological spectrum from the inseparability of ontology and methodology (see also Chapters 4 and 8, and Hall (2003)). These functions are illustrated in Figure 8 by five markers.

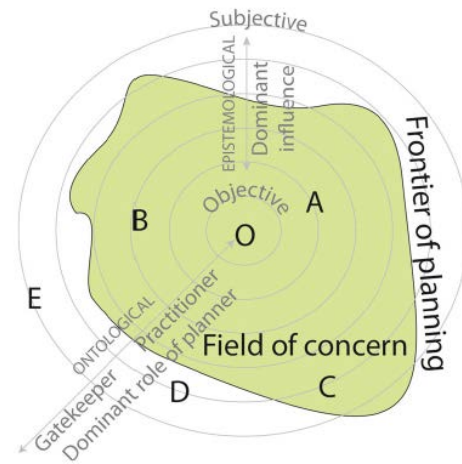


Figure 8: Urban planning's field of concern depicted as a surface of two dimensions: an ontological dimension and an epistemological dimension (source: author, as published in Carter (2016b)).

Points A and B denote subjects that lie within planning's core remit, whereas the distortion of point C indicates a subject which planners have explicitly chosen to include within the scope of their planning work of their own volition. Points D and E importantly describe those subjects which planners have, actively or passively, chosen to exclude from the scope of planning.

Irrespective of whether the decision was intentional or not, it remains that urban planners have excluded dogs from the scope of their planning activity. The remainder of this chapter explores why planning excludes dogs and provides insight into how planning on the frontier takes place.

Why urban planning lacks concern for dogs

Four sequential hurdles to urban planning for dogs emerge from the descriptive accounts of urban planners with each hurdle situating on an ontological spectrum. Just as the planning profession has its own ontology, planners themselves have ontologies which position on a scale from realism to relativism. I characterise the ontologies of planners in how they rationalise the exclusion of dogs through their willingness to disrupt institutional norms and accommodate dogs. The planner's ontology affects their perception of their role and provides some insight into how their ideologies contribute in different ways to their exclusion of dogs from the practice of urban planning.

Firstly, a *speciesist hierarchy* emerges from the anthropocentric language used by urban planners which overtly empowers humans over dogs; that is, a real and absolute exclusion of dogs from urban planning:

“A question for local laws people probably, but my understanding of animal management is that it sits within local laws in terms of how it’s actually... like the mechanisms that actually control it are local laws and not planning restrictions.” – UP 19

“Because the issue of dogs is about management and providing opportunities which is not really an urban planning issue...” – UP 13

“So everybody’s reacting to this and local councils are introducing all these local laws and systems which is all around covering backsides. It’s all about risks and punishing dogs mostly.” – UP 23

Whilst the exact position of dogs relative to humans lacks consensus, urban planning ascribes a clear priority to humans over dogs. Some planners refer to the question of dogs as one of management rather than planning; in doing so, dogs are referred to in a language of ‘issues’ rather than ‘subjects’, implying they are a problem to be managed through local laws rather than more positively as subjects of urban planning. One planner infers that dogs are considered by councils to be a risk and that local laws and restrictions to ‘punish’ dogs is the council managing that risk in a rational way.

If this anthropocentrism is conceded, urban planners next consider *universality* which permits some allowance for dogs as subjects of planning *if and only if* a supporting community consensus exists. Some planners acknowledge that dogs are capable of being planned for; however, urban planning for dogs lacks justification because not everybody has a preference to own a dog or likes dogs:

“I think in some of that work [structure planning] that there’s perhaps more of a chance of the needs of dog owners and that sort of thing being considered, rather than actually looking at the planning scheme tools themselves and trying to mandate a minimum amount of open space in a house to accommodate a dog when you don’t actually know whether or not the future owner is going to have a dog or even likes dogs. Do you know what I mean? Like where do you draw the line?” – UP 19

“I guess you’re sort of assuming that everyone would have a dog, ‘cos we’re accommodating for population growth as a whole, so all people within a municipality or within wider Melbourne. Dogs could be accommodated to a certain extent through things like minimum space standards.” – UP 10

Universalism imposes a requirement for a shared understanding of urban planning for dogs; such a consensus does not exist in practice which, in turn, excludes dogs from planning. It is particularly curious that a lack of universal dog ownership acts as a barrier in considering urban planning for dogs. If such requirements extended to other ‘subjects’ of planning, then feasibly very little planning could take place since very little is relevant to every person. In other words, dogs have to meet a higher standard than humans before they are worthy of consideration as subjects of urban planning.

If urban planners accept that a speciesist hierarchy exists and that planning for dogs does not need to apply universally, then a subtle ontological shift from realism to relativism takes place as planners become willing to disrupt the anthropocentrism inherent to urban planning and accordingly consider dogs as potential subjects of planning. The next consideration for planners is therefore where and when should urban planning for dogs reasonably commence, introducing *species ranking*:

“I think that planning will challenge to put that on the agenda to be quite honest because there are so many issues that planning needs to deal with. I mean, affordability and accessibility, you can’t even get mandatory accessibility requirements in apartments at the moment. So there’s a whole lot of core stuff that we aren’t getting in.” – UP 22

“If we’re looking at the environmental impact of a development, we’re going to pay a lot more attention and time to that than we are to the amenity of dogs, or the priority of dogs in a future residential subdivision.” – UP 19

The ranking of species questions the priority of human needs over those of other species. Where this invisible ‘line in the sand’ locates is influenced by different ideologies of where dogs sit in relation to humans and contributes to a lack of consensus and controversy. Accordingly, the question of when urban planning ought to commence remains unresolved and dogs continue to be excluded from planning despite relaxing the segregation of dogs and urban planning.

Even if urban planners determine that they ought to commence planning for dogs, the question of whether the planning is for dogs or dog owners then arises: a question of *human agency* as introduced in Chapter 4. In practice, the needs of dog owners are taken by proxy to represent the innate needs of dogs (whatever those may be). The language which planners use to speak of dogs is often speaking of dog owners as a stakeholder group. The needs of the dog owners, as indistinct from other humans, then

supersede the innate needs of dogs whose needs are assumed as met by urban planners as an ancillary benefit or consequence of the agency relationship:

“The planning system specifically... prioritises the environment and people and the economy and those sorts of things. And perhaps in that, under those social amenity factors, somewhere under that, you’d start having things about having areas for people to walk dogs, adequate open space and good links between residential communities. And potentially that’s not just about dogs, it’s about people who want to ride bikes, it’s about kids who want to kick a football, and all those other things. And then potentially if you put it as an off-lead park, then potentially mums don’t want the kids to kick the football there because there are too many dogs... So it’s sort of balancing that sort of interplay, I guess.” – UP 19

“The priority for walkability: We’re looking at things like age friendly cities and child friendly cities. Like, how do you plan for kids and how do you plan for older persons? Basically, if you make something universally accessible and walkable, you’re generally providing for a whole age spectrum, including people who’ll want to walk their dogs. So it’s about trying to create a safe and pleasant walking environment which is for everyone who wants to get up and walk. Whilst I don’t think we’ve got... we don’t have explicit planning policy for dog-walking or dog ownership as such, the sort of city we’re trying to create particularly in our renewal areas, it’s one that would be conducive to that sort of environment.” – UP 22

Human agency embodies the anthropocentrism inherent to urban planning: that even when planners choose to include dogs as subjects of planning, they instead plan for Michael’s (2000) ‘hudogledogs’ or some other composite dog owner-dog identity as subjects of their planning; this is indeed an important distinction which reflects in part a ‘dog-walking city’ of Howell (2015, pp.171-3) (see also Chapter 4). That this distinction between dog and agent is largely overlooked by planners epitomises why dogs are ultimately excluded as subjects of urban planning in practice.

Together these four hurdles connect urban planners to dogs, with any one hurdle frustrating attempts to plan for dogs, if not defeating attempts altogether. Perhaps more directly expressed, some councils clearly articulate that their values prioritise planning for humans, accordingly focusing activities and resources in favour of humans from the outset:

“Councils plan for people. If you were doing your community planning work and dogs came up in those conversations as an important asset, and opportunities for dogs and the relationships they have with health and wellbeing and those sorts of things, then you would find that at that high level... [but] if that didn’t come up in those conversations, you wouldn’t necessarily find it at that high strategic level, because we’ve got so many responsibilities to manage that we do try and focus them on people.” – UP 13

“Not ‘to be considered’, but I suppose it’s a balancing act between the needs of different people within the community and not prioritising one group over another. And then again there’s probably another question and I don’t have the answer, but to what extent do you prioritise the needs of dogs over the needs of people? And that’s probably like a bigger ethical/moral question.” – UP 19

Urban planners justify their focus on people by speaking about the many other responsibilities they have, to humans. In making these assertions, they are implicitly favouring humans over other species despite in some cases believing that they are in fact doing the opposite. The urban planning profession is fundamentally about people and the focus of planning on the needs of people is unsurprising. It is however interesting that the planners themselves may be unaware of such natural anthropocentric inclinations and in fact by balancing the needs of human stakeholder groups, they are prioritising humans over other species.

This section examined the extent and effect of these polarised views on the exclusion of dogs from urban planning. Urban planning is essentially protected from dogs by four sequential hurdles of speciesist hierarchy, universality, species ranking and human agency, which need to be addressed before planning considers dogs as a subject in their own right. The community remains in a constant state of confusion over how dogs ought to feature in planning, leading planners to exercise their powers to create consistency from chaos, for the most part excluding dogs in the process. This lack of community consensus makes planning for dogs particularly difficult for urban planners to comprehend.

14. DISCUSSION AND CONCLUSION

“In the world of planning and wicked problems... Here the aim is not to find the truth, but to improve some characteristics of the world where people [*and animals*] live.”

- Rittel and Webber (1973, p.167), adapted by author

My thesis demonstrates a complexity underlying planning for dogs in Melbourne. I have examined the subject of planning for dogs through the words and actions of key institutional actors: the animal management officers, open space planners and urban planners. This comparative study examines planning for dogs through the discourse of eight representative local government councils, yielding insight into how these separate council functions work in combination to achieve outcomes for dogs in practice. The various outcomes for dogs reflect the nature and scope of the attention of planning (and by extension society) to the needs of dogs in urban environments. Through investigating these different outcomes, I gain both a critical and practical understanding of how dogs are treated in practice as a problem of justice for dogs.

My exploratory and critical study of institutional discourse describes how dogs are accounted for by councils, the voices of key stakeholders collectively providing a unique reflection on why dogs are accounted for in this way. My thesis offers a contemporary, practical insight into justice for dogs and belongs to a subset of the broader discourse on justice for animals. My thesis is timely in light of an intensified focus in recent decades on the impacts of humanity and their cities on nature and the ever-increasing densification of humans and sharing of urban environments with other species: an account of Wolch's (1996) *Zoöpolis* in practice (with credit to Donaldson and Kymlicka (2011) here too). Despite this contemporary shift, the professions of animal management, open space planning and urban planning remain broadly focused on humanity. This thesis importantly serves to remind planning practitioners of all disciplines of the need to consider how they account for other species when planning cities of the future.

In section 14.1, I construct a narrative of justice for dogs as both a philosophy and practice framed by critical reflections drawn from the principal findings of my study. This illustrates how the actions of councils affect the justness of outcomes for dogs and directly relates the outcomes of my study to the underlying research questions that form the basis of my inquiry. Through this, I show that anthropocentrism and the role of

human agency fundamentally connect the practice of planning for dogs to the outcomes of justice for dogs. In section 14.2, I reflect on these conclusions in the context of applying the philosophical models of justice presented in Chapter 3 and find that utilitarianism may play a less important role in the provision of justice toward dogs in urban environments than the literature theorises. To conclude, in section 14.3 I position my study in the body of broader scholarly work and critically appraise its importance and significance in the context of improving outcomes of justice for dogs. This examination in turn suggests particular philosophical guideposts for further inquiry into planning for dogs.

14.1 Justice and planning for dogs in urban environments

In Chapter 1, I introduced a research problem and two research questions that reflect the scope and methodology of my study:

Research Question 1: Through their normative conceptions of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

Research Question 2: In the practice of management and planning for dogs, how do institutions affect the opportunities afforded to dogs for justice as liberty, language and action?

This section revisits these research questions and distils the key findings and narrative of my thesis, thus demonstrating the relevance of my study in describing how dogs are afforded opportunities by councils and planners to realise their innate capabilities. My study describes how councils and planners afford justice to dogs in the normative and in practice.

Justice implications of planning for dogs in the normative

Planning actions and language are individual to each planner and guided by their underlying set of personal values and professional ontology. This performative discourse governs the liberty and, ultimately, capability and authenticity afforded to dogs by that planner. Taken as a whole however, the institution espouses a collective set of values and an institutional ontology which govern how it functions as an organisation and how it affords opportunities for dogs to fulfil their capabilities.

Institutional ontology differentiates professions by how work is undertaken rather than what work is undertaken. Animal management, open space planning and urban

planning professions perform separate functions, affecting dogs in different ways. Planning for dogs is however a composite function with an emerging performative dichotomy of process and outcomes; in other words, planning for dogs reflects a composite institutional ontology. The policies, strategies and plans which emerge from this collective effort are interesting from an institutional perspective. How, why and by whom those policies, strategies and plans are made is by contrast interesting from a professional perspective. The emerging ontological tensions between these professions offer a lens to observe justice for dogs in practice.

The underlying institutional ontology of a council intermediates the community's hypothetical and manifold conception with the realised physical fabric of the urban environment. Where the council's internal ontologies broadly align, the council is able to work in relative internal harmony to meet and reflexively adapt external community expectations. That there are many sets of regulation which govern dogs in different councils demonstrates a fundamental lack of agreement on the treatment of dogs within each council, this disagreement extending to a lack of consistent treatment of dogs in planning. Such a lack of consensus on the treatment of dogs at an institutional level in turn reflects an underlying lack of broader community consensus on the treatment of dogs and highlights the importance of community expectations in linking institutional ontology with the community perception of dogs.

Community perceptions as an outcome intertwine with community expectations as a normative assumption. Councils affect the community's perception of dogs through their language and actions towards dogs. The transparency and procedural regularity of the barking dog enforcement process achieves relative harmony in the community as the actions of the institution (to enforce the law) reflect the expectations of the community (for council to enforce the law). If councils act in a way that is contrary to community expectations however, the community perception of dogs can consequently suffer. The ambiguity in definition and bespoke enforcement of effective control across various councils makes consistent treatment of dogs intractable; that is, the ontological basis for effective control is not aligned with a compliance-based treatment. The effective control enforcement process achieves disharmony in the community as the actions of the institution do not generally meet the expectations of the community, thereby contributing to a detrimental perception of dogs in the community.

This lack of consensus in council and the broader community on the appropriate treatment of dogs from a regulatory perspective reflects different views on species, these in turn affecting the planning for dogs at councils. In comparison to human subjects, dogs are ostensibly the ‘other’ and consequently are subject to different (and more stringent) thresholds for admissibility to urban planning’s field of concern and consideration by planners more broadly. There are a number of ideological barriers which arise in planning for dogs across animal management, open space planning and urban planning, any one of which efficiently redirects the attentions of that planning back toward human interests. These barriers together define the scope and operation of human agency as it affects planning for dogs in practice. A variety of institutional and individual values underpin the exercise of human agency in practice, filtering what liberties are afforded to dogs and influencing how councils speak about dogs through their language and how councils act towards dogs through physical urban outcomes.

Planning is a values-laden practice and my study finds planning for dogs to be undeniably wicked. Institutional value sets comprise an irreconcilable plurality of individual values and align with each institution’s core ontology and practices. Planning for dogs cannot be *a priori* anthropocentric however anthropocentrism is shown in my study to be a dominant (perhaps *the* dominant) and differentiating value pervading the practice of planning for dogs. In planning for dogs, anthropocentrism manifests in the decisions humans make to admit dogs into *their* urban environment. Human agency links the performative actions of planners and the various representations of the community to outcomes of justice for dogs. Justice towards dogs is reflected through the language and actions of planners representing dog owners in the community that in turn act in agency for their dogs. Such agency allows humans to determine what rights dogs ought to have and what rights should be preserved as exclusively human; that is, human agency expresses a freedom to exercise speciesism.

Domesticated dogs live in the private realm however interact with the broader community in the public realm, particularly in public open space, and human interests are shown to trump canine interests in the planning of public open space. Planners decide what allowance should be made for dogs in public open space, which public open space should be affected by such allowances and how that allowance of space should work alongside other, often conflicting human uses. These freedoms afforded to dogs are an outcome of the language and actions of planners in reflecting and

responding to community expectations. What the planners say and do then directly affects justice for dogs through liberty, language and action, leading to consideration of the practical aspects of planning for dogs.

Justice implications of planning for dogs in practice

The practice of planning for dogs concerns both how policies, plans and strategies are made and what policies, plans and strategies are produced; in other words, the practice of planning for dogs involves both process and outcomes. The frontier of urban planning is defined by the drivers of what planning gets done and why that planning gets done, describing a logical boundary which separates the interests of planning from the 'other'. This boundary is controlled by urban planners in the interests of planners as they actively choose which subjects they admit into the scope of planning and, in some cases, which subjects they exclude. Planning for dogs is however a multidisciplinary pursuit and unsurprisingly has a variety of different outcomes in practice. These decisions may or may not be in the interests of the broader community and, in the case of planning for dogs, may lead to a range of different expectations, perceptions and rights of dogs in the urban environment.

Approaches to animal management are situated along an ontological spectrum of education, compliance and enforcement, with the adopted approach broadly reinforcing the internal governance structure of each council. In order to understand how dogs might be planned for going forward, it is necessary to establish a baseline which describes how dogs are managed at present. The activity of planning for the management of dogs by councils is regulated by the Victorian government whereby each council must prepare a *Domestic Animal Management Plan* ('DAMP'). The DAMP has an overwhelming focus on state-level issues, providing the community with consistency and general assurance that each council's planned actions accord with the requirements of state legislation. Normative planning favours consistency to align community and institutional expectations and, in turn, improve the perception of dogs in the community. Planning for dogs in practice however suffers from the consistency afforded by a relatively inflexible DAMP structure, whereby the DAMP action plans lack focus on issues of local importance and consequently lack commitment of financial and other resources from the councils themselves. The uniform construction of the DAMP detracts from the ability of councils to implement planning for dogs in their

local context, substantially diluting the relevance of any DAMP action plans in practice. The activities described in the DAMP action plans are nevertheless important to achieve more just outcomes for dogs. Should councils implement their DAMP action plans in entirety, the outcome for dogs in terms of their rights and welfare would be unequivocally enhanced. By councils not implementing their DAMP action plans in whole or part, just outcomes for dogs become secondary to other priorities of council. The activity of planning for dogs is inextricably associated with the DAMP action planning process, this being seen by many animal management officers as the fulfilment of a statutory requirement where any favourable outcomes for dogs are contingent on the limited funding and the internal politics of individual councils. A statutory fulfilment focus such as this is evidently sub-optimal in achieving just outcomes for dogs.

Looking beyond statutory fulfilment, achieving just outcomes in planning for dogs subsequently depends on the prioritisation process of each council and how dogs feature in that process. The Victorian government has no control over what planned actions are implemented by councils and when that implementation takes place. Lacking any animal management audit function or power, the Victorian government relies on councils to implement their DAMP action plans and formulates its own animal management policy and responses on the assumption that these local actions take place as planned; this contributes largely to the inefficacy of non-school-based, broader community education programs around dog bite prevention. Even if animal management officers believe that the DAMP is ineffective (as some do), they continue to prepare the document primarily as it is a statutory requirement to do so. For the DAMP to succeed in practice however, there needs to be some trade-off between consistency and the capability for councils to create plans that are truly relevant to their local context. In other words, consistency is preferred in the normative to legitimise a need to plan whereas flexibility is preferred in the practice of planning for dogs to ensure the most appropriate outcomes are achieved for the local context.

In order to plan for dogs in practice, humans must exercise agency over dogs as a species. Decisions which planners make through the exercise of human agency directly impact a dog's access to freedoms in the community, curtailing a dog's freedom both absolutely and relatively. In absolute terms, dogs are prescribed only certain space to function and are prohibited from other spaces at the sole discretion of the planner. In

relative terms however, dogs are generally afforded freedoms in spaces which are perceived to be inferior in some way and their use of spaces is regulated as subordinate to competing human activities. Even decisions which do afford dogs primacy are made by humans acting in agency for dogs, with any planning in favour of dogs being a decision made by humans primarily for the greater satisfaction or utility of humans. The pervasive application of anthropocentrism to animal management, open space planning and urban planning has led to particular urban outcomes for dogs which have direct implications on the structure of justice for dogs in practice.

14.2 Philosophy of justice for dogs in the context of anthropomorphism

Earlier in Chapter 3, I introduced two fundamental models of justice for dogs, ‘justice as fairness’ and ‘justice as capabilities’, these respectively operationalising rights as interests and rights as freedoms. Despite their different motivations, the models each have a potential to create similar outcomes of justice. When the subject of justice is another species however, the behaviour of these models becomes less certain. Anthropomorphism introduces both personal values and experiences in describing other species, these governing what kind of justice ought to be applied. This section examines the application of these models in the context of justice for dogs. Which model is most appropriate to consider justice for dogs is equivalent to asking whether rights as interests or rights as freedoms are most appropriate for dogs. I briefly describe how the models may conceivably work in practice in the context of my conclusions from earlier in this chapter and find that a model of ‘justice as capabilities’ is weaker in scope but better matched to how justice for dogs works in practice, suggesting that utilitarianism may not play as great a role in determining an applied structure of justice for dogs as some branches of the literature examined in Chapter 3 alluded to.

The model of rights as interests relies in part on the human concept of utility and the incidence of pleasure and pain. Whilst such utilitarian concepts are fundamentally anthropocentric, they have nevertheless contributed greatly to the cause of animal welfare through anthropomorphising the experience of suffering to other species. In light of its contribution to the rights of animals more broadly, a consideration of rights as interests leads into a discussion of John Rawls’ ‘justice as fairness’ and its potential applicability to dogs.

‘Justice as fairness’ is quintessentially comparative in evaluating whether action A is as fair as action B and so forth, with the role of human agency in determining fairness being particularly important where the subject of justice is another species. Some proponents of the ‘justice as fairness’ doctrine require that the subject of justice must be capable of making the decision of what is fair and able to ‘conceive of their own good’; in other words, the subject of justice must have a minimal capability of rational thought and there is no human agency. This requirement allows dogs to be a subject of justice on the condition that they are able to rank different outcomes in terms of fairness; that is to say, access to justice for dogs under this presumption is profoundly uncertain if we are restrained from exercising anthropomorphism. Alternatively, there are other proponents of the ‘justice as fairness’ doctrine that argue the subject need not be capable of making the decision of what is fair; that is, there is no minimal requirement to conceive rationality. By construction, human agency must be permitted in this circumstance to enable others to act where the subject of justice is incapable of ascertaining fairness. But in exercising human agency where the subject of that agency is a dog, humans again must make a declaration steeped in anthropomorphic dilemmas if that representation is to be conceivably authentic. The debate over rationality of dogs in the context of justice then essentially becomes a moot point. ‘Justice as fairness’ appears incapable of providing authentic justice for dogs regardless of whether dogs are rational creatures; the burden presented by anthropomorphism in making a relative judgement seems too much for the logical framework to bear to yield any kind of practical and authentic measure of justice for dogs.

On the other hand, liberation is a central feature of the Capabilities Approach to rights. The Capabilities Approach by its nature is individual and absolute: what is a desirable capability for one individual or one species need not be a desirable capability for another and no one capability is necessarily better or worse than any other capability. On its own, the Capabilities Approach describes various rights but does not describe how they are assigned; that is, the Capabilities Approach is not in itself a model of justice. Amartya Sen extends the Capabilities Approach to a performative model of justice through describing ‘substantive opportunities’ for liberation as a currency of justice.

‘Justice as capabilities’ asks questions of an absolute nature, whether action A enables capability α without contemplation of any comparative actions. Whereas ‘justice as

fairness' determines a definitive course of action in comparison to other actions, 'justice as capabilities' can only determine whether a particular action enables a particular capability. In this way, 'justice as capabilities' is a comparatively weaker measure of justice however its specificity aids the question of justice for dogs. If the Capabilities Approach is the barometer of justice for dogs, then so long as humans act in such a way as to bolster the opportunities to achieve canine capabilities, whatever those happen to be, a more just outcome results. There is no way for humans to articulate a complete set of canine capabilities or authentically rank order in importance the capabilities we have deduced. Despite not being able to know if it is more just to enable capability α compared with capability β , we may still deduce that enabling either of these capabilities is worthwhile for the dog by responsible or critical anthropomorphic assumptions such as those inherent in a conceived fundamental capability set for dogs (e.g., Table 7 on page 104). The anthropomorphic burden on us as human agents is far less in the case of 'justice as capabilities' than 'justice as fairness' since we are not making decisions about which actions a dog would prefer, rather we are making decisions about whether a given action would improve a particular capability for a dog; that is to say, 'justice as capabilities' is far more specific. Justice for dogs can then be achieved in a piecemeal fashion, broadly in accord with the scenario-based approach of Sen (see Chapter 3 and Nussbaum (2011, p.76) in particular). 'Justice as capabilities' provides an absolute framework which may deduce actions that yield more just outcomes for dogs without an unreasonable burden of anthropomorphism.

This critical analysis challenges my earlier conclusion from the literature that a modified Rawlsian 'justice as fairness' framework accords with the fundamental dominance of utilitarianism in defining the nature of human-dog relationships (see Chapter 3). Utilitarianism in practice however requires that decisions be made with regard to the utility of the individual and the community as a collective, such decisions being necessarily based on a comparison of the outcome of a particular action to an alternate action (or inaction). Importantly, any utilitarian assessment of the interests of dogs relies abundantly on anthropomorphism. On the other hand, 'justice as capabilities' requires that decisions be made with regard to a single action and that action's impact on the capability of dogs, thus reducing the burden of anthropomorphism since the decision-making is of a more specific nature. Despite the fact that utilitarianism may be a better reflection of how rights of animals are

determined in society, it remains that justice as capabilities is a more feasible framework to determine justice for dogs given the lack of ability of a human agent to accurately evaluate utility on behalf of a dog.

Anthropocentrism in animal management, open space planning and urban planning generates outcomes which are desirable to humans; these outcomes however may or may not be desirable to dogs. So long as we provide dogs with greater opportunities to attain capabilities which we deduce are explicitly in their favour, then we are contributing to their freedoms and improving the justice of outcomes by our anthropocentric actions. Those actions which we deduce are overtly in favour of humans then contribute to reducing the freedoms of dogs and reducing their access to just outcomes. The absolute nature of ‘justice as capabilities’ enables a rational evaluation of individual human actions and their absolute impact on dogs, circumventing the inherent wickedness of deducing a rank ordering of canine capabilities by importance. Such critical awareness empowers planners to be mindful of justice as it applies to dogs when making their plans (see also Table 10 on page 113).

14.3 Where to from here?

In her *Zoöpolis* paper, Jennifer Wolch argues that urban planning as a profession has ignored non-human species when making plans (Wolch 1996). In a follow-up essay six years later, she detects a shift in the focus of geographers and that positive regard of non-human species had become more prevalent. Wolch suggests a broad program of research to expand human geography to encompass more-than-human interests based on four goals, these in turn encapsulating the need to:

- “understand urbanization from the perspective of its meaning for animal life”;
- “trace how and why attitudes and practices toward animals and patterns of urban human-animal interactions change over time and space”;
- “explore how urban animal ecology is produced by science, social discourse and political economic forces”; and
- “grasp how human-animal relations as an urban practice are shaped by managerial plans, grassroots activism and the agency of animals” (Wolch 2002, pp.735-6).

A decade later, Lorimer and Srinivasan (2013) opine that despite this increased interest of scholars in other species, geography remains persistently shackled to its

anthropocentric ways, thus restricting its growth into more-than-human fields. Indeed, the anthropocentrism shown in my account of planning for dogs appears remarkably similar. Accordingly, many of the applied urban studies which broach the subject of dogs introduced in Chapters 1, 2 and 4 notably fail to explicitly distinguish between dogs as the central phenomenon of interest for the study and dogs as the conduit for a study concerning an otherwise human phenomenon, an omission which I believe needs to be addressed more broadly. In order to ‘animal’ the city, Instone and Sweeney (2014) identify a need to cease distinguishing between the ontologies of human and animal as separate considerations when making plans for urban environments. This ‘animalisation’ is not to necessarily imply a prerequisite Darwinism in positively planning for dogs, rather it concedes that in planning for dogs, urban environments are not only *our* home but *their* home too, a step towards a more ‘compassionate’ geography (Matthews 2012). My thesis critically examines how the animal management, open space planning and urban planning professions attend to dogs and why that may be the case, in doing so it positions between a pure anthropocentric urban planning study and a pure animal-oriented study situated in an urban environment. There remains substantial interdisciplinary research prospects in more-than-human geography (Buller 2014; Lorimer & Srinivasan 2013). My examination of dogs in urban environments from animal management, open space planning and urban planning perspectives contributes to this broader program of work.

The study of dogs in the private realm is not a new field for researchers, this field typically examining aspects of dogs and humans cohabiting in urban communities including both health and welfare effects (see Chapter 2). There remains however a critical need to study dogs in public urban environments (Gaunet, Pari-Perrin & Bernardin 2014). The public dog affects people through action, interaction and, in some cases, a simple presence. In defining the boundary of acceptable behaviours, animal management activities and regulations describe what dogs are capable of and what dogs ought to do in public. Further understanding of how the public dog is regulated is identified as an area of future research interest (Brown, K 2014; Weston et al. 2014); how dogs then interact with humans becomes of interest to urban researchers also, particularly how dogs affect human social connections (Bueker 2013; Graham & Glover 2014). Despite its interest in other species, this emerging body of research nevertheless generally focuses on dogs through a lens of human needs and outcomes, mirroring the

persistent anthropocentric geography identified by Lorimer and Srinivasan (2013) which hinders the maturity of more-than-human geographies.

In part perhaps, this lack of canine-centric research stems from a need to understand the nexus of power and rights in local government activities which describe and define the 'right to the city' (Brown, A 2013). Inverting the planning dialogue leads then to anthropomorphic issues that arise from such innate anthropocentrism in planning discourse. The philosophical musings of Irvine (2008, ch.3), Johnston (2008) and Karlsson (2012) demonstrate that these anthropomorphic constraints can be managed with care, however it appears that these are nevertheless a philosophical barrier which planners struggle to cross in practice. My research offers an opportunity for planners to reflect and reflexively consider how they plan for dogs in practice.

In Victoria, urban planning is at its core a rational enterprise despite any appearance that the profession has taken a wholesale deliberative turn, with any participatory planning at best controlled in a rational way (see Chapter 4). This rational behaviour does not appear to help the novel thought required to make philosophical leaps to account for dogs in a fundamental way in urban planning and in planning more generally. Whittemore (2014) for example writes of the benefits of thinking outside of urban planning's comfort zone, in effect transforming urban planning from a deterministic scientific process to an interpretive dynamic form of art. This novel thinking is an illustration of how urban planning and the broader disciplines of animal management and open space planning might reflexively transform and adapt to new challenges in urban environments.

This study attends in part to the broad and ambitious agenda of Wolch (2002) through its critical examination of how local government planning attends to the more-than-human interests of dogs. The scope of my study was limited to examining the way planners consider dogs through a critical and exploratory examination of their institutional discourse through a lens of justice for dogs. Seventeen findings (Appendix 1) and six recommendations (Appendix 2) emerged from my study, these outcomes offering planners opportunities to improve the rights and liberties of dogs and, in turn, enhancing their downstream ability to realise their own innate capabilities and to live more authentic lives, improving the outcomes of justice for dogs in Melbourne.

A natural human-animal dichotomy emerges from my study of planning for dogs, according with the habitual ontological distinction of human-animal in the practice of Australian city planning (Instone & Sweeney 2014). This distinction is analogous to the human action of regulation and control of dogs on the one hand in contrast to the human consideration of responsible or critical anthropomorphism in guiding our attentions to dogs on the other (my adaptation of the “geographical schism” of Gaunet, Pari-Perrin and Bernardin (2014, p.384)). This in turn provides a logical structure to outline a program of further research suggested by my study.

In attending to the practical consideration of the regulation and control of dogs in urban environments, animal management, open space planning and urban planning professions regulate and control the actions and interactions of the public dog with the broader community. My thesis questions the effectiveness of the structure of regulation and control in Victoria, in particular the efficacy of the *Domestic Animal Management Plan* and associated regulatory controls in executing their core remit of education, compliance and enforcement. Brown, K (2014) outlines a need for holistic reflection on how regulation affects humans, animals and the landscape, certainly according with the ‘animaling’ of the city postulate of Instone and Sweeney (2014). By attending to the normative consideration of a responsible and critical anthropomorphism in planning for dogs, I suggest that traditional human-animal power relationships be tested and inverted. The Victorian planning system at present is driven by a fundamental anthropocentrism which agitates against any efforts of planners to act in favour of other species. My study has highlighted the importance of ontology and human agency in determining how planning for other species is done. Even when planning positively for dogs, as observed most remarkably with the recent spike in activity planning for dog parks in urban environments, humans have a tendency to plan with utilitarianism at front-of-mind and making the choice in that time and space to be generous towards dogs because it is within their power and their desire to make that decision. The dualisms introduced in the decision to fence public open space provide a lens through which to see how those issues balance. In this sense, future research in planning for dogs must respect the need to be responsible in exercising our agency over dogs as we make decisions, in doing so reformulating planning to encapsulate practical and positive consideration of other species when making plans. Planning for dogs is therefore truly worthwhile and contributes to a broader outcome of greater justice for other species.

PART VI: REFERENCE MATERIAL

15. BIBLIOGRAPHY

- Agger, A 2012, 'Towards tailor-made participation: how to involve different types of citizens in participatory governance', *Town Planning Review*, vol. 83, no. 1, pp. 29-45.
- Albrechts, L 2004, 'Strategic (spatial) planning reexamined', *Environment and Planning B: Planning and Design*, vol. 31, no. 5, pp. 743-58.
- 2006, 'Shifts in strategic spatial planning? Some evidence from Europe and Australia', *Environment and Planning A*, vol. 38, no. 6, pp. 1149-70.
- 2010, 'More of the same is not enough! How could strategic spatial planning be instrumental in dealing with the challenges ahead?', *Environment and Planning B: Planning and Design*, vol. 37, no. 6, p. 1115.
- 2013, 'Reframing strategic spatial planning by using a coproduction perspective', *Planning Theory*, vol. 12, no. 1, pp. 46-63.
- Aldenderfer, MS & Blashfield, RK 1984, *Cluster Analysis*, Sage Publications, California.
- Allmendinger, P & Tewdwr-Jones, M 2002, 'The Communicative Turn in Urban Planning: Unravelling Paradigmatic, Imperialistic and Moralistic Dimensions', *Space and Polity*, vol. 6, no. 1, pp. 5-24.
- American Humane Association 2012, *Keeping Pets (Dogs and Cats) in Homes: A Three-Phase Retention Study: Phase I: Reasons for Not Owning a Dog or Cat*, viewed 15 April 2013, <<http://www.americanhumane.org/about-us/newsroom/news-releases/aha-pet-retention-study.html>>.
- Anderson, K 1997, 'A walk on the wild side: a critical geography of domestication', *Progress in Human Geography*, vol. 21, no. 4, pp. 463-85.
- Anderson, W, Reid, C & Jennings, G 1992, 'Pet ownership and risk factors for cardiovascular disease', *Medical Journal of Australia*, vol. 157, pp. 298-301.
- Arhant-Sudhir, K, Arhant-Sudhir, R & Sudhir, K 2011, 'Pet ownership and cardiovascular risk reduction: Supporting evidence, conflicting data and underlying mechanisms', *Clinical and Experimental Pharmacology and Physiology*, vol. 38, no. 11, pp. 734-8.
- Aristotle 2015a, *The History of Animals*, University of Adelaide, Adelaide, <<https://ebooks.adelaide.edu.au/a/aristotle/history/complete.html>>.
- 2015b, *Metaphysics*, University of Adelaide, Adelaide, <<https://ebooks.adelaide.edu.au/a/aristotle/metaphysics/complete.html>>.
- 2015c, *Politics*, University of Adelaide, Adelaide, <<https://ebooks.adelaide.edu.au/a/aristotle/a8po/complete.html>>.
- Arkow, P & Dow, S 1984, 'The ties that do not bind: A study of the human-animal bonds that fail', in RK Anderson, BL Hart & LA Hart (eds), *The Pet Connection: Its influence on Our Health and Quality of Life*, University of Minnesota, Minneapolis, pp. 348-54.
- Arnstein, S 1969, 'A ladder of citizen participation', *Journal of the American Institute of Planners*, vol. 35, no. 4, pp. 216-24.
- Asher, L, Buckland, EL, Phylactopoulos, CI, Whiting, MC, Abeyesinghe, SM & Wathes, CM 2011, 'Estimation of the number and demographics of companion dogs in the UK', *BMC Veterinary Research*, vol. 7, no. 1, p. 74.
- Australian Bureau of Statistics 2011a, *Local Government Areas (Victoria)*, viewed 28 February 2014, <<https://www.censusdata.abs.gov.au/datapacks/DataPacks?release=2011>>.

- 2011b, *TableBuilder*, viewed 1 November 2013,
<<https://www.censusdata.abs.gov.au/webapi/jsf/selectTopic.xhtml>>.
- Australian Companion Animal Council 2006, *Contribution of the pet care industry to the Australian economy*, 6th ed., BIS Shrapnel, North Sydney.
- 2010, *Contribution of the pet care industry to the Australian economy*, 7th ed., BIS Shrapnel, North Sydney.
- Australian Electoral Commission 2011a, *Australia's major electoral developments timeline: 1788-1899*, viewed 28 October 2015,
<http://www.aec.gov.au/Elections/Australian_Electoral_History/reform.htm>.
- 2011b, *Australia's major electoral developments timeline: 1900-Present*, viewed 28 October 2015,
<http://www.aec.gov.au/Elections/Australian_Electoral_History/Reform_present.htm>.
- Bahlig-Pieren, Z & Turner, DC 1999, 'Anthropomorphic Interpretations and Ethological Descriptions of Dog and Cat Behavior by Lay People', *Anthrozoos*, vol. 12, no. 4, pp. 205-10.
- Banyule City Council 2012, *Domestic Animal Management Plan 2012-2016*, viewed 18 July 2013, <<http://www.banyule.vic.gov.au/Services/Pets-and-Animals/Domestic-Animal-Plan>>.
- Bardill, N & Hutchinson, S 1997, 'Animal-Assisted Therapy With Hospitalized Adolescents', *Journal of Child and Adolescent Psychiatric Nursing*, vol. 10, no. 1, pp. 17-24.
- Bartel, R, McFarland, P & Hearfield, C 2014, 'Taking a de-binarised envirosocial approach to reconciling the environment vs economy debate: lessons from climate change litigation for planning in NSW, Australia', *The Town Planning Review*, vol. 85, no. 1, pp. 67-96.
- Baum, HS 1996, 'Why the rational paradigm persists: Tales from the field', *Journal of Planning Education and Research*, vol. 15, no. 2, pp. 127-35.
- Bauman, AE, Russell, SJ, Furber, SE & Dobson, AJ 2001, 'The epidemiology of dog walking: an unmet need for human and canine health', *Medical Journal of Australia*, vol. 175, no. 11-12, p. 632.
- Bayside City Council 2010, *10.11 Open Space Strategy Report (26 October 2010 Ordinary Meeting of Council Attachments: Part 2)*, viewed 14 March 2014,
<http://pandora.nla.gov.au/pan/15138/20110210-0000/www.bayside.vic.gov.au/26_October_2010_Ordinary_Meeting_Attachments_Part_2.pdf>.
- 2012a, *Bayside Domestic Animal Management Plan 2012-2016*, viewed 18 July 2013, <http://www.bayside.vic.gov.au/Domestic_Management_Plan.pdf>.
- 2012b, *Bayside Open Space Strategy*, viewed 24 March 2014,
<http://bayside.vic.gov.au/living_in_bayside/open_space.htm>.
- Beatley, T 1989, 'Environmental Ethics and Planning Theory', *Journal of Planning Literature*, vol. 4, no. 1, pp. 1-32.
- Beck, AM 2000, 'The use of animals to benefit humans: animal-assisted therapy', in AH Fine (ed.), *Handbook on Animal-Assisted Therapy: Theoretical foundations and guidelines for practice*, Academic Press, San Diego, California, pp. 21-40.
- Beck, AM & Katcher, AH 1983, 'Introduction', in AM Beck & AH Katcher (eds), *New perspectives on our lives with companion animals*, University of Pennsylvania Press, Philadelphia, pp. 3-6.
- 1996, *Between Pets and People: The Importance of Animal Companionship*, Purdue University Press, Lafayette, Indiana.

- 2003, 'Future Directions in Human-Animal Bond Research', *American Behavioral Scientist*, vol. 47, no. 1, pp. 79-93.
- Bekoff, M & Pierce, J 2009, 'Wild Justice: Honor and Fairness among Beasts at Play', *American Journal of Play*, vol. 1, no. 4, pp. 451-75.
- Bell, S & Morse, S 2008, *Sustainability indicators: Measuring the immeasurable?*, Earthscan, London.
- Bender, T 2010, 'Postscript: reassembling the city: networks and urban imaginaries', in I Farías & T Bender (eds), *Urban Assemblages: How Actor-Network Theory Changes Urban Studies*, Routledge, New York, pp. 303-24.
- Bennett, J 2010, *Vibrant Matter: a political ecology of things*, Duke University Press, Durham.
- Bentham, J 2004, *An introduction to the principles of morals and legislation*, Thomson Gale, Michigan.
- Black, K 2012, 'The Relationship Between Companion Animals and Loneliness Among Rural Adolescents', *Journal of Pediatric Nursing*, vol. 27, no. 2, pp. 103-12.
- Blanc, N 2003, 'La place de l'animal dans les politiques urbaines', *Communications*, vol. 74, pp. 159-75.
- Blecha, J & Davis, A 2014, 'Distance, proximity, and freedom: Identifying conflicting priorities regarding urban backyard livestock slaughter', *Geoforum*, vol. 57, pp. 67-77.
- Bockstaller, C & Girardin, P 2003, 'How to validate environmental indicators', *Agricultural Systems*, vol. 76, no. 2, pp. 639-53.
- Böhm, A 2004, 'Theoretical Coding: Text Analysis in Grounded Theory', in U Flick, E von Kardoff & I Steinke (eds), *A Companion to Qualitative Research*, Sage Publications Ltd., London, pp. 270-5.
- Boom, K, Ben-Ami, D, Croft, DB, Cushing, N, Ramp, D & Boronyak, L 2012, 'Pest and Resource: A Legal History of Australia's Kangaroos', *Animal Studies Journal*, vol. 1, no. 1, pp. 17-40.
- Borthwick, F 2009, 'Governing Pets and Their Humans', *Griffith Law Review*, vol. 18, no. 1, pp. 185-201.
- Bosniak, L 2000, 'Universal citizenship and the problem of alienage', *Northwestern University Law Review*, vol. 94, no. 3, pp. 963-82.
- Bossel, H 1999, *Indicators for sustainable development: theory, method, applications*, International Institute for Sustainable Development Winnipeg.
- Bradshaw, J 2012, *In Defence of Dogs*, Penguin Books, London.
- Bragdon, CR & Miller, RK 1978, 'The regulation and control of animal noise in the community', *Sound and vibration*, vol. 12, no. 12, pp. 8-11.
- Brand, R & Gaffikin, F 2007, 'Collaborative Planning in an Uncollaborative World', *Planning Theory*, vol. 6, no. 3, pp. 282-313.
- Brimbank City Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 18 July 2013, <http://www.brimbank.vic.gov.au/COUNCIL/Council_Policies_Strategies_Plan/s/Council_Plans/Domestic_Animal_Management_Plan>.
- Brown, A 2013, 'The Right to the City: Road to Rio 2010', *International Journal of Urban and Regional Research*, vol. 37, no. 3, pp. 957-71.
- Brown, C 2016, *Dr. Chris Brown's letter to Australia*, Pet Positives, viewed 2 August 2016, <<https://www.petpositives.com.au/keep-australia-pet-friendly/dr-chris-brown-s-letter-to-australia/>>.

- Brown, K 2014, 'The Role of Landscape in Regulating (Ir)responsible Conduct: Moral Geographies of the 'Proper Control' of Dogs', *Landscape Research*, vol. 40, no. 1, pp. 39-56.
- Brügger, A, Kaiser, FG & Roczen, N 2011, 'One for all? Connectedness to nature, inclusion of nature, environmental identity, and implicit association with nature', *European Psychologist*, vol. 16, no. 4, pp. 324-33.
- Bryant, CD 1979, 'The zoological connection: animal-related human behavior', *Social Forces*, vol. 58, no. 2, pp. 399-421.
- Bryman, A 2012, *Social Research Methods*, 4th edn, Oxford University Press, New York.
- Bryson, JM 2004, *Strategic planning for public and nonprofit organizations*, Jossey-Bass, San Francisco.
- Buckland, EL, Volk, HA, Burn, CC & Abeyesinghe, SM 2014, 'Owner perceptions of companion dog expressions of positive emotional states and the contexts in which they occur', *Animal Welfare*, vol. 23, no. 3, pp. 287-96.
- Bueker, CS 2013, "'Leads" to expanded social networks, increased civic engagement and divisions within a community: The role of dogs', *Journal of Sociology and Social Welfare*, vol. 40, no. 4, pp. 211-36.
- Buller, H 2014, 'Animal geographies I', *Progress in Human Geography*, vol. 38, no. 2, pp. 308-18.
- Buxton, M, Goodman, R & Budge, T 2005, 'Planning and deregulation', *Australian Planner*, vol. 42, no. 2, pp. 52-8.
- Cacioppo, JT, Hughes, ME, Waite, LJ, Hawkley, LC & Thisted, RA 2006, 'Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses', *Psychology and Aging*, vol. 21, no. 1, pp. 140-51.
- Calarco, M 2004, 'Heidegger's zoontology', in M Calarco & P Atterton (eds), *Animal Philosophy*, Continuum Books, London, pp. 18-30.
- Callon, M 1986, 'Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay', in J Law (ed.), *Power, action, and belief: A new sociology of knowledge?*, Routledge, London, pp. 196-223.
- Campbell, DT 1975, "'Degrees of Freedom" and the Case Study', *Comparative Political Studies*, vol. 8, no. 2, pp. 178-93.
- Cardinia Shire Council 2012, *Domestic Animal Management Plan 2012-16*, viewed 18 July 2013, <http://www.cardinia.vic.gov.au/Page/Page.aspx?Page_Id=9>.
- Carlisle-Frank, P, Frank, JM & Nielsen, L 2005, 'Companion animal renters and pet-friendly housing in the US', *Anthrozoos*, vol. 18, no. 1, pp. 59-77.
- Carter, SB 2016a, 'Establishing a framework to understand the regulation and control of dogs in urban environments: a case study of Melbourne, Australia', *SpringerPlus*, vol. 5, no. 1190.
- 2016b, 'Why planning limits its concern: a case study of planning for dogs in Melbourne, Australia', *Australian Planner*, vol. 53, no. 3, pp. 251-9.
- n.d., 'How planning limits its concern: a case study of planning for dogs in Melbourne, Australia'.
- Carter, SB, Day, JE & Fryd, O 2015, 'Don't fence me in: Understanding local government decisions to allocate and fence public open space for dogs in Melbourne, Australia', in P Burton & H Shearer (eds), *State of Australian Cities National Conference 2015*, Gold Coast, Queensland.
- Caspi, A, Harrington, H, Moffitt, TE, Milne, BJ & Poulton, R 2006, 'Socially isolated children 20 years later: Risk of cardiovascular disease', *Archives of Pediatrics & Adolescent Medicine*, vol. 160, no. 8, pp. 805-11.

- Christian, H, Giles-Corti, B & Knuiman, M 2010, 'I'm just a'-walking the dog' correlates of regular dog walking', *Family and Community Health*, vol. 33, no. 1, pp. 44-52.
- Chur-Hansen, A, Winefield, H & Beckwith, M 2008, 'Reasons Given by Elderly Men and Women for Not Owning a Pet, and the Implications for Clinical Practice and Research', *Journal of Health Psychology*, vol. 13, no. 8, pp. 988-95.
- City of Boroondara 2013, *Domestic Animal Management Plan 2012-2016*, viewed 18 July 2013, <<http://boroondara.vic.gov.au/residents/animals/domestic-animal-management-pla>>.
- City of Casey 2013, *Domestic Animal Management Plan 2013-2016*, viewed 18 July 2013, <<http://www.casey.vic.gov.au/council/policies-strategies/d-f/domestic-animal-management-plan-2013-2016>>.
- City of Darebin 2013, *Domestic Animal Management Plan 2013-2017*, viewed 21 January 2014, <http://www.darebin.vic.gov.au/Page/Page.aspx?Page_Id=80>.
- City of Glen Eira 2013, *Domestic Animal Management Plan 2013-2016*, viewed 18 July 2013, <http://www.gleneira.vic.gov.au/Community/Pets/Domestic_Animal_Management_Plan>.
- City of Greater Dandenong 2013, *Domestic Animal Management Plan 2013-2016*, viewed 18 July 2013, <<http://www.greaterdandenong.com/document/25576/domestic-animal-management-plan>>.
- City of Kingston 2012, *Domestic Animal Management Plan 2012-2016*, viewed 18 July 2013, <<http://www.kingston.vic.gov.au/Local-Laws-Waste/Local-Laws/Your-Pet/Domestic-Animal-Management-Plan>>.
- City of Melbourne 2013, *Domestic Animal Management Plan: 1 July 2013 - 30 June 2017*, viewed 18 July 2013, <<http://www.melbourne.vic.gov.au/ForResidents/Pets/Pages/DomesticAnimalManagementPlan.aspx>>.
- City of Melton 2012, *Domestic Animal Management Plan 2012-2016*, viewed 21 January 2014, <http://www.melton.vic.gov.au/Regulations/Animals/Domestic_Animal_Management_Plan>.
- City of Monash 2013, *Domestic Animal Management Plan 2013-2017*, viewed 21 January 2014, <<http://www.monash.vic.gov.au/publications/animal-management-plan.htm>>.
- City of Port Phillip 2009a, *City of Port Phillip Open Space Strategy*, viewed 6 July 2014, <http://portphillip.vic.gov.au/default/2_-_Attachment_1_-_Revised_Open_Space_Strategy.pdf>.
- 2009b, *Report 3: Dog off leash review (10 August 2009 Ordinary Meeting of Council Agenda)*, viewed 6 July 2014, <http://portphillip.vic.gov.au/default/3_-_Dog_Off_Leash_Review.pdf>.
- 2012, *Domestic Animal Management Plan 2012-2016*, viewed 18 July 2013, <http://portphillip.vic.gov.au/domestic_animal_management_plan.htm>.
- City of Stonnington 2010, *Public Realm Strategy*, viewed 30 June 2014, <<http://www.stonnington.vic.gov.au/DownloadDocument.ashx?DocumentID=3156>>.
- 2013, *Domestic Animal Management Plan 2013-2017*, viewed 18 July 2013, <<http://stonnington.vic.gov.au/news-and-information/media-releases/media-releases-2013/new-plan-helps-protect-local-pets/>>.

- City of Whittlesea 2013, *2013-2017 Domestic Animal Management Plan*, viewed 18 July 2013, <<http://www.whittlesea.vic.gov.au/your-council/plans-strategies-and-policies/domestic-animal-management-plan>>.
- City of Yarra 2013, *Domestic Animal Management Plan 2013-2017*, viewed 25 January 2014, <<http://www.yarracity.vic.gov.au/services/Animal-management/domestic-animal-management-plan/>> and personal communication (21 January 2014)>.
- Coe, JB, Adams, CL & Bonnett, BN 2007, 'A focus group study of veterinarians' and pet owners' perceptions of the monetary aspects of veterinary care', *Journal of the American Veterinary Medical Association*, vol. 231, no. 10, pp. 1510-8.
- 2009, 'Prevalence and nature of cost discussions during clinical appointments in companion animal practice', *Journal of the American Veterinary Medical Association*, vol. 234, no. 11, pp. 1418-24.
- Coeckelbergh, M 2009, 'Distributive Justice and Co-Operation in a World of Humans and Non-Humans: A Contractarian Argument for Drawing Non-Humans into the Sphere of Justice', *Res Publica*, vol. 15, no. 1, pp. 67-84.
- Cohen, GA 1993, 'Equality of What? on Welfare, Goods, and Capabilities', in M Nussbaum & A Sen (eds), *The Quality of Life*, Oxford University Press, Oxford.
- Collier, D & Mahon, JE, Jr. 1993, 'Conceptual "Stretching" Revisited: Adapting Categories in Comparative Analysis', *The American Political Science Review*, vol. 87, no. 4, pp. 845-55.
- Connelly, S & Richardson, T 2004, 'Exclusion: the necessary difference between ideal and practical consensus', *Journal of Environmental Planning and Management*, vol. 47, no. 1, pp. 3-17.
- Corbin, J & Strauss, A 2008, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 3rd edn, Sage Publications, Thousand Oaks.
- Cowell, R 1997, 'Stretching the Limits: Environmental Compensation, Habitat Creation and Sustainable Development', *Transactions of the Institute of British Geographers*, vol. 22, no. 3, pp. 292-306.
- Crocker, DA & Robeyns, I 2010, 'Capability and Agency', in C Morris (ed.), *Amartya Sen*, Cambridge University Press, New York, pp. 60-90.
- Cross, NJ, Rosenthal, K & Phillips, CJC 2009, 'Risk factors for nuisance barking in dogs', *Australian Veterinary Journal*, vol. 87, no. 10, pp. 402-8.
- Crowley-Robinson, P, Fenwick, DC & Blackshaw, JK 1996, 'A long-term study of elderly people in nursing homes with visiting and resident dogs', *Applied Animal Behaviour Science*, vol. 47, no. 1-2, pp. 137-48.
- Cutt, H, Giles-Corti, B, Knuiman, M & Burke, V 2007, 'Dog ownership, health and physical activity: A critical review of the literature', *Health and Place*, vol. 13, no. 1, pp. 261-72.
- Cutt, H, Giles-Corti, B, Wood, L, Knuiman, M & Burke, V 2008, 'Barriers and motivators for owners walking their dog: results from qualitative research', *Health Promotion Journal of Australia*, vol. 19, no. 2, pp. 118-24.
- Cutt, H, Knuiman, M & Giles-Corti, B 2008, 'Does getting a dog increase recreational walking?', *International Journal of Behavioral Nutrition and Physical Activity*, vol. 5, no. 1, p. 17.
- Dalton, LC 1986, 'Why the rational paradigm persists—the resistance of professional education and practice to alternative forms of planning', *Journal of Planning Education and Research*, vol. 5, no. 3, pp. 147-53.

- Daniels, GD & Kirkpatrick, JB 2006, 'Comparing the characteristics of front and back domestic gardens in Hobart, Tasmania, Australia', *Landscape and Urban Planning*, vol. 78, no. 4, pp. 344-52.
- Davidoff, P 1965, 'Advocacy and Pluralism in Planning', *Journal of the American Institute of Planners*, vol. 31, no. 4, pp. 331-8.
- Davis, AL, Schwebel, DC, Morrongiello, BA, Stewart, J & Bell, M 2013, 'Dog Bite Risk: An Assessment of Child Temperament and Child-Dog Interactions.', *International Journal of Environmental Research and Public Health*, vol. 9, no. 8, pp. 3002-13.
- Dawkins, MS 1985, 'The Scientific Basis for Assessing Suffering in Animals', in P Singer (ed.), *In Defence of Animals*, Blackwell, Oxford, pp. 27-40.
- de Groot, M, Winnubst, MH, van Schie, N & van Ast, JA 2014, 'Visioning with the Public: Incorporating Public Values in Landscape Planning', *European Planning Studies*, vol. 22, no. 6, pp. 1165-81.
- de Jong-Gierveld, J 1987, 'Developing and testing a model of loneliness', *Journal of Personality and Social Psychology*, vol. 53, no. 1, pp. 119-28.
- Delaney, D 2001, 'Making Nature/Marking Humans: Law as a Site of (Cultural) Production', *Annals of the Association of American Geographers*, vol. 91, no. 3, pp. 487-503.
- Denk, T 2009, 'Comparative multilevel analysis: proposal for a methodology', *International Journal of Social Research Methodology*, vol. 13, no. 1, pp. 29-39.
- Denters, B & Mossberger, K 2006, 'Building Blocks for a Methodology for Comparative Urban Political Research', *Urban Affairs Review*, vol. 41, no. 4, pp. 550-71.
- Department of Environment and Primary Industries 2014, *Domestic Animal Management Plans*, viewed 22 January 2014, <<http://www.depi.vic.gov.au/pets/community-and-education/domestic-animal-management-plans>>.
- DiGiacomo, N, Arluke, A & Patronek, G 1998, 'Surrendering Pets to Shelters: The Relinquisher's Perspective', *Anthrozoos*, vol. 11, no. 1, pp. 41-51.
- Donaldson, S & Kymlicka, W 2011, *Zoopolis: A political theory of animal rights*, Oxford University Press.
- Dwyer, D 2006, 'Justice at Last?: The Temporary Teachers Club and the Teaching Service (Married Women) Act 1956', *Labour History*, no. 91, pp. 151-68.
- Eccles, D & Bryant, T 2011, *Statutory Planning in Victoria (4th ed.)*, The Federation Press, Sydney.
- Eckersley, R 1998, 'Beyond Human Racism', *Environmental Values*, vol. 7, no. 2, pp. 165-82.
- 1999, 'The discourse ethic and the problem of representing nature', *Environmental Politics*, vol. 8, no. 2, pp. 24-49.
- 2010, 'Representing nature', in S Alonso, J Keane & W Merkel (eds), *The Future of Representative Democracy*, Cambridge University Press, Cambridge, United Kingdom, pp. 236-57.
- Eddy, J, Hart, LA & Boltz, RP 1988, 'The Effects of Service Dogs on Social Acknowledgments of People in Wheelchairs', *The Journal of Psychology*, vol. 122, no. 1, pp. 39-45.
- Ellen, IG, Mijanovich, T & Dillman, K-N 2001, 'Neighborhood Effects on Health: Exploring the Links and Assessing the Evidence', *Journal of Urban Affairs*, vol. 23, no. 3-4, pp. 391-408.

- Elo, S & Kyngäs, H 2008, 'The qualitative content analysis process', *Journal of Advanced Nursing*, vol. 62, no. 1, pp. 107-15.
- Epping, JN 2011, 'Dog ownership and dog walking to promote physical activity and health in patients', *Current Sports Medicine Reports*, vol. 10, no. 4, pp. 224-7.
- Fainstein, S 2010, *The Just City*, Cornell University Press, New York.
- Faludi, A 1973, *Planning Theory*, Pergamon Press, Oxford.
- 2000, 'The Performance of Spatial Planning', *Planning Practice and Research*, vol. 15, no. 4, pp. 299-318.
- Farm Animal Welfare Council 2007, *Five Freedoms*, viewed 19 November 2014, <<http://webarchive.nationalarchives.gov.uk/20080610144050/http://www.fawc.org.uk/freedoms.htm>>.
- Feinberg, J 2013, 'The rights of animals and unborn generations', in R Shafer-Landau (ed.), *Ethical Theory: An Anthology*, Wiley-Blackwell, Malden, Massachusetts, pp. 372-80.
- Fernandez, RM & Kulik, JC 1981, 'A multilevel model of life satisfaction: Effects of individual characteristics and neighbourhood composition', *American Sociological Review*, vol. 46, no. 6, pp. 840-50.
- Few, R, Brown, K & Tompkins, EL 2007, 'Public participation and climate change adaptation: avoiding the illusion of inclusion', *Climate Policy*, vol. 7, no. 1, pp. 46-59.
- Fieldhouse, E & Cutts, D 2010, 'Does Diversity Damage Social Capital? A Comparative Study of Neighbourhood Diversity and Social Capital in the US and Britain', *Canadian Journal of Political Science/Revue canadienne de science politique*, vol. 43, no. 02, pp. 289-318.
- Fielding, W 2008, 'Dogs: A Continuing and Common Neighborhood Nuisance of New Providence, The Bahamas', *Society & Animals*, vol. 16, no. 1, pp. 61-73.
- Fischler, R 2000, 'Communicative planning theory: A Foucauldian assessment', *Journal of Planning Education and Research*, vol. 19, no. 4, pp. 358-68.
- Fitzsimmons, M 1989, 'The matter of nature', *Antipode*, vol. 21, no. 2, pp. 106-20.
- Flint, EL, Minot, EO, Perry, PE & Stafford, KJ 2014, 'A survey of public attitudes towards barking dogs in New Zealand', *New Zealand Veterinary Journal*, vol. 62, no. 6, pp. 321-7.
- Flint, EL, Minot, EO, Stevenson, M, Perry, PE & Stafford, KJ 2013, 'Barking in home alone suburban dogs (Canis familiaris) in New Zealand', *Journal of Veterinary Behavior: Clinical Applications and Research*, vol. 8, no. 4, pp. 302-5.
- Foote, N 1956, 'A Neglected Member of the Family', *Marriage and Family Living*, vol. 18, no. 3, pp. 213-8.
- Forester, J 1980, 'Critical Theory and Planning Practice', *Journal of the American Planning Association*, vol. 46, no. 3, pp. 275-86.
- 1982, 'Planning in the Face of Power', *Journal of the American Planning Association*, vol. 48, no. 1, pp. 67-80.
- 1984, 'Bounded Rationality and the Politics of Muddling Through', *Public Administration Review*, vol. 44, no. 1, pp. 23-31.
- 1987, 'Planning In the Face of Conflict: Negotiation and Mediation Strategies in local Land Use Regulation', *Journal of the American Planning Association*, vol. 53, no. 3, pp. 303-14.
- Foucault, M 2002, 'The Organic Structure of Beings', in *The Order of Things*, Routledge, London, pp. 245-51.
- Fox, R & Walsh, K 2011, 'Furry belongings: pets, migration and home', in J Bull (ed.), *Animal Movements • Moving Animals: Essays on direction, velocity and agency*

- in *humanimal encounters*, Crossroads of Knowledge Series at the Centre for Gender Research, University Printers, Uppsala, pp. 97-118.
- Francione, GL 2000, *Introduction to animal rights: your child or the dog?*, Temple University Press.
- Frankston City Council 2012, *Domestic Animal Management Plan 2012-2016*, viewed 22 January 2014, <personal communication>.
- Friedmann, E, Katcher, AH, Lynch, JJ & Thomas, SA 1980, 'Animal Companions and One-Year Survival of Patients after Discharge from a Coronary Care Unit', *Public Health Reports (1974-)*, vol. 95, no. 4, pp. 307-12.
- Friedmann, E & Son, H 2009, 'The Human-Companion Animal Bond: How Humans Benefit', *Veterinary Clinics of North America - Small Animal Practice*, vol. 39, no. 2, pp. 293-326.
- Friedmann, E & Thomas, S 1985, 'Health Benefits of Pets for Families', in M Sussman (ed.), *Pets and the Family*, The Haworth Press, New York, pp. 191-203, viewed 2013/04/04, DOI 10.1300/J002v08n03_14, <http://www.tandfonline.com/doi/abs/10.1300/J002v08n03_14>.
- Friedmann, E & Thomas, SA 1995, 'Pet ownership, social support, and one-year survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST)', *The American Journal of Cardiology*, vol. 76, no. 17, pp. 1213-7.
- Friedmann, E, Thomas, SA & Son, H 2011, 'Pets, Depression and Long-term Survival in Community Living Patients Following Myocardial Infarction', *Anthrozoos*, vol. 24, no. 3, pp. 273-85.
- Friedmann, J 2008, 'The Uses of Planning Theory: A Bibliographic Essay', *Journal of Planning Education and Research*, vol. 28, no. 2, pp. 247-57.
- Fudge, E 2000, 'The Shape of a Man: Knowing Animals and the Law', in *Perceiving animals: humans and beasts in early modern English culture*, St Martin's Press Inc., New York, pp. 115-42.
- Fulfer, K 2013, 'The Capabilities Approach to Justice and the Flourishing of Nonsentient Life', *Ethics and the Environment*, vol. 18, no. 1, pp. 19-42.
- Gaffikin, F & Sterrett, K 2006, 'New Visions for Old Cities: The Role of Visioning in Planning', *Planning Theory & Practice*, vol. 7, no. 2, pp. 159-78.
- Garner, R 2003, 'Animals, politics and justice: Rawlsian liberalism and the plight of non-humans', *Environmental Politics*, vol. 12, no. 2, pp. 3-22.
- 2012, 'Rawls, Animals and Justice: New Literature, Same Response', *Res Publica*, vol. 18, no. 2, pp. 159-72.
- 2013, *A theory of justice for animals: Animal rights in a nonideal world*, Oxford University Press.
- Gaunet, F, Pari-Perrin, E & Bernardin, G 2014, 'Description of Dogs and Owners in Outdoor Built-Up Areas and Their More-Than-Human Issues', *Environmental Management*, vol. 54, no. 3, pp. 383-401.
- George, A 2009, 'Quantitative and Qualitative Approaches to Content Analysis', in K Krippendorff & MA Bock (eds), *The Content Analysis Reader*, Sage Publications, Thousand Oaks.
- George, A & Bennett, A 2005, *Case Studies and theory development in the social sciences*, MIT Press, Massachusetts.
- Gilchrist, J, Sacks, JJ, White, D & Kresnow, M-J 2008, 'Dog bites: still a problem?', *Injury Prevention*, vol. 14, no. 5, pp. 296-301.
- Giles-Corti, B, Broomhall, MH, Knuiman, M, Collins, C, Douglas, K, Ng, K, Lange, A & Donovan, RJ 2005, 'Increasing walking: How important is distance to,

- attractiveness, and size of public open space?', *American Journal of Preventive Medicine*, vol. 28, no. 2, Supplement 2, pp. 169-76.
- Goličnik, B & Ward-Thompson, C 2010, 'Emerging relationships between design and use of urban park spaces', *Landscape and Urban Planning*, vol. 94, no. 1, pp. 38-53.
- Gordon, RT, Schatz, CB, Myers, LJ, Kosty, M, Gonczy, C, Kroener, J, Tran, M, Kurtzhals, P, Heath, S, Koziol, JA, Arthur, N, Gabriel, M, Hempling, J, Hempling, G, Nesbitt, S, Tucker-Clark, L & Zaayer, J 2008, 'The use of canines in the detection of human cancers', *Journal Of Alternative And Complementary Medicine (New York, N.Y.)*, vol. 14, no. 1, pp. 61-7.
- Graham, TM & Glover, TD 2014, 'On the Fence: Dog Parks in the (Un)Leashing of Community and Social Capital', *Leisure Sciences*, vol. 36, no. 3, pp. 217-34.
- Hall, P 2003, 'Aligning Ontology and Methodology in Comparative Research', in J Mahoney & D Rueschemeyer (eds), *Comparative Historical Analysis in the Social Sciences*, Cambridge University Press, New York, pp. 373-404.
- Hall, P & Tewdwr-Jones, M 2011, *Urban and Regional Planning (5th ed.)*, Routledge, Oxford.
- Ham, SA & Epping, JN 2006, 'Dog walking and physical activity in the United States', *Preventing chronic disease [electronic resource]*, vol. 3, no. 2.
- Hanrahan, C 2011, 'Challenging Anthropocentrism in Social Work Through Ethics and Spirituality: Lessons from Studies in Human-Animal Bonds', *Journal of Religion & Spirituality in Social Work: Social Thought*, vol. 30, no. 3, pp. 272-93.
- Haraway, DJ 2003, *The Companion Species Manifesto: dogs, people, and significant otherness*, Prickly Paradigm Press, Chicago.
- 2008, *When species meet*, University of Minnesota Press.
- Hazan, C & Zeifman, D 1994, 'Sex and the psychological tether', in K Bartholomew & D Perlman (eds), *Advances in personal relationships: Attachment processes in adulthood*, Jessica Kingsley, London, vol. 5, pp. 151-77.
- Head, BW 2008, 'Wicked Problems in Public Policy', *Public Policy*, vol. 3, no. 2, pp. 101-18.
- Headey, B 1999, 'Health Benefits and Health Cost Savings Due to Pets: Preliminary Estimates from an Australian National Survey', *Social Indicators Research*, vol. 47, no. 2, pp. 233-43.
- Headey, B & Grabka, M 2007, 'Pets and Human Health in Germany and Australia: National Longitudinal Results', *Social Indicators Research*, vol. 80, no. 2, pp. 297-311.
- Headey, B, Grabka, M, Kelley, J, Reddy, P & Tseng, Y-P 2002, 'Pet ownership is good for your health and saves public expenditure too: Australian and German longitudinal evidence', *Australian Social Monitor*, vol. 5, no. 4, pp. 93-9.
- Headey, B, Na, F & Zheng, R 2008, 'Pet dogs benefit owners' health: A 'natural experiment' in China', *Social Indicators Research*, vol. 87, no. 3, pp. 481-93.
- Healey, P 1998, 'Collaborative planning in a stakeholder society', *Town Planning Review*, vol. 69, no. 1, p. 1.
- 2009a, 'In Search of the "Strategic" in Spatial Strategy Making', *Planning Theory & Practice*, vol. 10, no. 4, pp. 439-57.
- 2009b, 'The Pragmatic Tradition in Planning Thought', *Journal of Planning Education and Research*, vol. 28, no. 3, pp. 277-92.
- Hecht, L, McMillin, DJ & Silverman, P 2001, 'Pets, Networks and Well-Being', *Anthrozoos*, vol. 14, no. 2, pp. 95-108.

- Heinrich, LM & Gullone, E 2006, 'The clinical significance of loneliness: A literature review', *Clinical Psychology Review*, vol. 26, no. 6, pp. 695-718.
- Heinsch, M 2012, 'Getting down to earth: Finding a place for nature in social work practice', *International Journal of Social Welfare*, vol. 21, no. 3, pp. 309-18.
- Hemsworth, S & Pizer, B 2006, 'Pet ownership in immunocompromised children—A review of the literature and survey of existing guidelines', *European Journal of Oncology Nursing*, vol. 10, no. 2, pp. 117-27.
- Hiebert, D & Ley, D 2003, 'Assimilation, Cultural Pluralism, and Social Exclusion among Ethnocultural Groups in Vancouver', *Urban Geography*, vol. 24, no. 1, pp. 16-44.
- Higgins, JW, Temple, V, Murray, H, Kumm, E & Rhodes, R 2013, 'Walking Sole Mates: Dogs Motivating, Enabling and Supporting Guardians' Physical Activity', *Anthrozoos*, vol. 26, no. 2, pp. 237-52.
- Hillier, J 1999, 'What values? Whose values?', *Ethics, Place and Environment*, vol. 2, no. 2, pp. 179-99.
- 2003, 'Agon'izing Over Consensus: Why Habermasian Ideals cannot be 'Real', *Planning Theory*, vol. 2, no. 1, pp. 37-59.
- Hobsons Bay City Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 21 January 2014, <http://www.hobsonsbay.vic.gov.au/Council/Local_laws_and_complaints/Animals/Animal_and_pet_permits>.
- House, J, Landis, K & Umberson, D 1988, 'Social relationships and health', *Science*, vol. 241, no. 4865, pp. 540-5.
- Howell, P 2012, 'Between the Muzzle and the Leash: Dog-walking, Discipline and the Modern City', in P Atkins (ed.), *Animal Cities: Beastly Urban Histories*, Ashgate Publishing group, Abingdon, pp. 221-41.
- 2015, *At Home and Astray: The Domestic Dog in Victorian Britain*, University of Virginia Press.
- Hsieh, H-F & Shannon, SE 2005, 'Three Approaches to Qualitative Content Analysis', *Qualitative Health Research*, vol. 15, no. 9, pp. 1277-88.
- Hursthouse, R 1999, *On Virtue Ethics*, Oxford University Press, Oxford.
- Huss, RJ 2005, 'No pets allowed: Housing issues and companion animals', *Animal Law*, vol. 11, pp. 69-130.
- Iannuzzi, D & Rowan, AN 1991, 'Ethical Issues in Animal-Assisted Therapy Programs', *Anthrozoos*, vol. 4, no. 3, pp. 154-63.
- Ilea, R 2008, 'Nussbaum's Capabilities Approach and Nonhuman Animals: Theory and Public Policy', *Journal of Social Philosophy*, vol. 39, no. 4, pp. 547-63.
- Imrie, R, Pinch, S & Boyle, M 1996, 'Identities, Citizenship and Power in the Cities', *Urban Studies*, vol. 33, no. 8, pp. 1255-61.
- Inglehart, RF & Woodward, M 1967, 'Language Conflicts and Political Community', *Comparative Studies in Society and History*, vol. 10, no. 1, pp. 27-45.
- Instone, L & Mee, K 2011, 'Companion Acts and companion species: boundary transgressions and the place of dogs in urban public space', in J Bull (ed.), *Animal Movements • Moving Animals: Essays on direction, velocity and agency in humanimal encounters*, Crossroads of Knowledge Series at the Centre for Gender Research, University Printers, Uppsala, pp. 229-50.
- Instone, L & Sweeney, J 2014, 'The trouble with dogs: 'animaling' public space in the Australian city', *Continuum*, vol. 28, no. 6, pp. 774-86.
- Irvine, L 2008, *Animals Culture And Society : If You Tame Me : Understanding Our Connection With Animals*, Temple University Press, Philadelphia, US.

- 2009, 'Companion Animals', in *Filling the Ark: Animal Welfare in Disasters*, Temple University Press, Philadelphia, pp. 19-39.
- Jackson, J & Natoli, A 2001, 'The Victoria planning provisions: Is there space for place?', *Urban Policy and Research*, vol. 19, no. 3, pp. 311-34.
- Jackson, P 2012, 'Situated activities in a dog park: Identity and conflict in human-animal space', *Society & Animals*, vol. 20, no. 3, pp. 254-72.
- Jackson, V 2007, 'People, pets and planning', *Australian Planner*, vol. 44, no. 2, pp. 6-7.
- Jacobs, J 1989, *The Death and Life of Great American Cities*, Vintage Books, New York.
- Jamieson, D & Regan, T 1985, 'Whales are not cetacean resources', in MW Fox & LD Mickley (eds), *Advances in Animal Welfare Science 1984*, Springer, Netherlands, vol. 1, pp. 101-14, DOI 10.1007/978-94-009-4998-0_11, <http://dx.doi.org/10.1007/978-94-009-4998-0_11>.
- Järvensivu, T & Törnroos, J-Å 2010, 'Case study research with moderate constructionism: Conceptualization and practical illustration', *Industrial Marketing Management*, vol. 39, no. 1, pp. 100-8.
- Jefferson, T & Preston, A 2005, 'Australia's "Other" Gender Wage Gap: Baby Boomers and Compulsory Superannuation Accounts', *Feminist Economics*, vol. 11, no. 2, pp. 79-101.
- Johnson, RA, Beck, AM, McCune, S, Griffin, JA & Esposito, L 2011, 'Future directions in dog walking', in RA Johnson, AM Beck & S McCune (eds), *The Health Benefits of Dog Walking for People and Pets: Evidence and Case Studies*, Purdue University Press, West Lafayette, pp. 181-91.
- Johnston, C 2008, 'Beyond the clearing: towards a dwelt animal geography', *Progress in Human Geography*, vol. 32, no. 5, pp. 633-49.
- Karlsson, F 2012, 'Critical Anthropomorphism and Animal Ethics', *Journal of Agricultural and Environmental Ethics*, vol. 25, no. 5, pp. 707-20.
- Katcher, AH, Beck, AM & Levine, D 1989, 'Evaluation of a Pet Program in Prison-The Pal Project at Lorton', *Anthrozoos*, vol. 2, no. 3, pp. 175-80.
- Kaźmierczak, A 2013, 'The contribution of local parks to neighbourhood social ties', *Landscape and Urban Planning*, vol. 109, no. 1, pp. 31-44.
- Kerswell, KJ, Bennett, P, Butler, KL & Hemsworth, PH 2009, 'Self-Reported Comprehension Ratings of Dog Behavior by Puppy Owners', *Anthrozoos*, vol. 22, no. 2, pp. 183-93.
- Kidd, AH & Kidd, RM 1994, 'Benefits and liabilities of pets for the homeless', *Psychological Reports*, vol. 74, no. 3, pp. 715-22.
- Knight, S & Edwards, V 2008, 'In the Company of Wolves: The Physical, Social, and Psychological Benefits of Dog Ownership', *Journal of Aging and Health*, vol. 20, no. 4, pp. 437-55.
- Knox City Council 2012a, *10.4 Knox Dog Play Park Update Report (25 September 2012 Knox City Council Minutes: Ordinary Meeting of Council)*, viewed 2 December 2013, <http://www.knox.vic.gov.au/Files/MeetingsCouncil/Council_Minutes_25_September_2012.pdf>.
- 2012b, *Knox Open Space Plan 2012-2022*, viewed 11 June 2014, <http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=3157>.
- 2013, *Domestic Animal Management Plan 2013-2017*, viewed 18 July 2013, <http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=1265>.

- Kobelt, AJ, Hemsworth, PH, Barnett, JL & Coleman, GJ 2003, 'A survey of dog ownership in suburban Australia—conditions and behaviour problems', *Applied Animal Behaviour Science*, vol. 82, no. 2, pp. 137-48.
- Kobelt, AJ, Hemsworth, PH, Barnett, JL, Coleman, GJ & Butler, KL 2007, 'The behaviour of Labrador retrievers in suburban backyards: The relationships between the backyard environment and dog behaviour', *Applied Animal Behaviour Science*, vol. 106, no. 1–3, pp. 70-84.
- Kohlbacher, F 2006, 'The Use of Qualitative Content Analysis in Case Study Research', *Forum: Qualitative Social Research*, vol. 7, no. 1 (21).
- Krippendorff, K 2004, *Content analysis: an introduction to its methodology*, 2nd edn, Sage Publications Inc., Thousand Oaks.
- Krohe Jr, J 2005, 'Who let the dogs out?', *Planning*, vol. 71, no. 2, pp. 24-7.
- Kwong, MJ & Bartholomew, K 2011, "“Not just a dog”: an attachment perspective on relationships with assistance dogs', *Attachment & Human Development*, vol. 13, no. 5, pp. 421-36.
- Kymlicka, W & Donaldson, S 2014a, 'Animal Rights, Multiculturalism, and the Left', *Journal of Social Philosophy*, vol. 45, no. 1, pp. 116-35.
- 2014b, 'Animals and the Frontiers of Citizenship', *Oxford Journal of Legal Studies*, vol. 34, no. 2, pp. 201-19.
- Kynch, J & Sen, A 1983, 'Indian women: well-being and survival', *Cambridge Journal of Economics*, vol. 7, pp. 363-80.
- Lail, P, McCormack, GR & Rock, M 2011, 'Does dog-ownership influence seasonal patterns of neighbourhood-based walking among adults? A longitudinal study', *BMC Public Health*, vol. 11.
- Land Victoria 2013, *VicMap Planning (cartographic boundary files vm-planning-overlay.*)*, Department of Sustainability and the Environment, Melbourne.
- Lauder, W, Sharkey, S & Mummery, K 2004, 'A community survey of loneliness', *Journal of Advanced Nursing*, vol. 46, no. 1, pp. 88-94.
- Laurier, E, Maze, R & Lundin, J 2006, 'Putting the Dog Back in the Park: Animal and Human Mind-in-Action', *Mind, Culture, and Activity*, vol. 13, no. 1, pp. 2-24.
- Lee, H-S, Shepley, M & Huang, C-S 2009, 'Evaluation of off-leash dog parks in Texas and Florida: A study of use patterns, user satisfaction, and perception', *Landscape and Urban Planning*, vol. 92, no. 3–4, pp. 314-24.
- Lefebvre, H 2003, *The Urban Revolution*, University of Minnesota Press, Minneapolis.
- LeGates, RT & Stout, F (eds) 2009, *The City Reader (4th ed.)*, Routledge, Oxford.
- Lenth, BE, Knight, RL & Brennan, ME 2008, 'The Effects of Dogs on Wildlife Communities', *Natural Areas Journal*, vol. 28, no. 3, pp. 218-27.
- Lentino, C, Visek, AJ, McDonnell, K & DiPietro, L 2012, 'Dog Walking Is Associated With a Favorable Risk Profile Independent of a Moderate to High Volume of Physical Activity', *Journal of Physical Activity & Health*, vol. 9, no. 3, pp. 414-20.
- Lepofsky, J & Fraser, JC 2003, 'Building Community Citizens: Claiming the Right to Place-making in the City', *Urban Studies*, vol. 40, no. 1, pp. 127-42.
- Levinas, E 2004, 'The name of a dog, or natural rights', in M Calarco & P Atterton (eds), *Animal Philosophy*, Continuum Books, London, pp. 47-50.
- Levine, GN, Allen, K, Braun, LT, Christian, HE, Friedmann, E, Taubert, KA, Thomas, SA, Wells, DL & Lange, RA 2013, 'Pet Ownership and Cardiovascular Risk: A Scientific Statement From the American Heart Association', *Circulation*, vol. 127, no. 23, pp. 2353-63.
- Levinson, BM 1961, 'The dog as a 'co-therapist.', *Mental Hygiene*, vol. 46, pp. 59-65.

- 1965, 'Pet Psychotherapy: Use of Household Pets in the Treatment of Behavior Disorder in Childhood', *Psychological Reports*, vol. 17, no. 3, pp. 695-8.
- 1983, 'The future of research into relationships between people and their animal companions', in AH Katcher & AM Beck (eds), *New perspectives on our lives with companion animals*, University of Pennsylvania Press, Philadelphia, pp. 536-50.
- Lidén, G 2013, 'What about theory? The consequences on a widened perspective of social theory', *Quality & Quantity*, vol. 47, no. 1, pp. 213-25.
- Lijphart, A 1971, 'Comparative Politics and the Comparative Method', *American Political Science Review*, vol. 65, no. 3, pp. 682-93.
- Lin, AC 1998, 'Bridging Positivist and Interpretivist Approaches to Qualitative Methods', *Policy Studies Journal*, vol. 26, no. 1, pp. 162-80.
- Lincoln, Y, Lynham, S & Guba, E 2011, 'Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited', in N Denzin & Y Lincoln (eds), *Handbook of Qualitative Research: fourth edition*, Sage Publications, Thousand Oaks, pp. 97-128.
- Lindsey, G 1999, 'Use of urban greenways: insights from Indianapolis', *Landscape and Urban Planning*, vol. 45, no. 2-3, pp. 145-57.
- Lippi, G & Cervellin, G 2012, 'Canine olfactory detection of cancer versus laboratory testing: myth or opportunity?', *Clinical Chemistry And Laboratory Medicine: CCLM / FESCC*, vol. 50, no. 3, pp. 435-9.
- Lochner, KA, Kawachi, I, Brennan, RT & Buka, SL 2003, 'Social capital and neighborhood mortality rates in Chicago', *Social Science & Medicine*, vol. 56, no. 8, pp. 1797-805.
- Lord, A 2012, *The Planning Game*, Routledge, New York.
- Lorimer, J & Srinivasan, K 2013, 'Animal Geographies', in NC Johnson, RH Schein & J Winders (eds), *Blackwell Companions to Geography : Wiley-Blackwell Companion to Cultural Geography*, John Wiley & Sons, Somerset, NJ, USA, pp. 328-38.
- Mahoney, J 2003, 'Strategies of Causal Assessment in Comparative Historical Analysis', in J Mahoney & D Rueschemeyer (eds), *Comparative Historical Analysis in the Social Sciences*, Cambridge University Press, New York, pp. 337-72.
- Mani, I & Maguire, JH 2009, 'Small Animal Zoonoses and Immunocompromised Pet Owners', *Topics in Companion Animal Medicine*, vol. 24, no. 4, pp. 164-74.
- Manning, A 1983, 'Ethological approaches to the human-companion animal bond', in AH Katcher & AM Beck (eds), *New perspectives on our lives with companion animals*, University of Pennsylvania Press, Philadelphia, pp. 7-16.
- Manningham City Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 18 July 2013, <http://manningham.vic.gov.au/council/policy_and_strategy_documents/dom_a_nimal.html?s=1142531730>.
- March, A 2010, 'Practising theory: When theory affects urban planning', *Planning Theory*, vol. 9, no. 2, pp. 108-25.
- March, A & Low, N 2004, 'Knowing and Steering: Mediatization, Planning and Democracy in Victoria, Australia', *Planning Theory*, vol. 3, no. 1, pp. 41-69.
- Maribyrnong City Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 21 January 2014, <http://www.maribyrnong.vic.gov.au/Page/Page.aspx?Page_Id=3379>.

- Martin, A, Akol, A & Gross-Camp, N 2015, 'Towards an Explicit Justice Framing of the Social Impacts of Conservation', *Conservation and Society*, vol. 13, no. 2, pp. 166-78.
- Matheny, G 2006, 'Utilitarianism and Animals', in P Singer (ed.), *In Defense of Animals: the second wave*, Blackwell, Massachusetts, pp. 13-25.
- Matisoff, D & Noonan, D 2012, 'Managing contested greenspace: Neighborhood commons and the rise of dog parks', *International Journal of the Commons*, vol. 6, no. 1, pp. 28-51.
- Matthews, J 2012, 'Compassion, Geography and the Question of the Animal', *Environmental Values*, vol. 21, no. 2, pp. 125-42.
- Mayring, P 2000, 'Qualitative Content Analysis', *Forum: Qualitative Social Research*, vol. 1, no. 2 (20).
- McCann, EJ 2001, 'Collaborative Visioning or Urban Planning as Therapy? The Politics of Public-Private Policy Making', *The Professional Geographer*, vol. 53, no. 2, pp. 207-18.
- McConnell, AR, Brown, CM, Shoda, TM, Stayton, LE & Martin, CE 2011, 'Friends with benefits: On the positive consequences of pet ownership', *Journal of Personality and Social Psychology*, vol. 101, no. 6, pp. 1239-52.
- McCool, SF & Stankey, GH 2004, 'Indicators of Sustainability: Challenges and Opportunities at the Interface of Science and Policy', *Environmental Management*, vol. 33, no. 3, pp. 294-305.
- McCormack, GR, Rock, M, Toohey, AM & Hignell, D 2010, 'Characteristics of urban parks associated with park use and physical activity: A review of qualitative research', *Health & Place*, vol. 16, no. 4, pp. 712-26.
- McEwen, G 2011, *Animal Law: Principles and Frontiers*, Barristers Animal Welfare Panel, viewed 17 January 2015, <<http://bawp.org.au/wp-content/uploads/2013/07/eBook-FINAL.pdf>>.
- McGregor, A 2004, 'Sustainable development and `warm fuzzy feelings': discourse and nature within Australian environmental imaginaries', *Geoforum*, vol. 35, no. 5, pp. 593-606.
- McNicholas, J & Collis, GM 2000, 'Dogs as catalysts for social interactions: Robustness of the effect', *British Journal of Psychology*, vol. 91, no. 1, pp. 61-70.
- Melson, GF 2000, 'Companion Animals and the Development of Children: Implications of the Biophilia Hypothesis', in AH Fine (ed.), *The handbook on animal assisted therapy: Theoretical foundations and guidelines for practice*, Academic Press, San Diego, California, pp. 375-83.
- Mendola, J 2014, 'Species and the Good', in *Human Interests or Ethics for Physicalists*, Oxford University Press, New York, pp. 147-58.
- Messent, PR 1983, 'Social facilitation of contact with other people by pet dogs', in AH Katcher & AM Beck (eds), *New perspectives on our lives with companion animals*, University of Pennsylvania Press, Philadelphia, pp. 37-46.
- Meul, M, Nevens, F & Reheul, D 2009, 'Validating sustainability indicators: Focus on ecological aspects of Flemish dairy farms', *Ecological Indicators*, vol. 9, no. 2, pp. 284-95.
- Michael, M 2000, 'The case of the Hudogledog', in *Reconnecting culture, technology, and nature: from society to heterogeneity*, Routledge, London, pp. 117-39.
- Midgley, M 1985, 'Persons and Non-Persons', in P Singer (ed.), *In Defence of Animals*, Basil Blackwell, Oxford, pp. 52-62.
- 1998, *Animals and why they matter*, University of Georgia Press, Athens, Georgia.

- Miles, MB & Huberman, AM 1994, *Qualitative Data Analysis: An Expanded Sourcebook*, Sage Publications, Thousand Oaks.
- Mill, JS 2001, in G Sher (ed.), *Utilitarianism*, Hackett Publishing Company, Indianapolis.
- Miller, R & Howell, G 2008, 'Regulating consumption with bite: Building a contemporary framework for urban dog management', *Journal of Business Research*, vol. 61, no. 5, pp. 525-31.
- Miller, S, Knight, R & Miller, C 2001, 'Wildlife Responses to Pedestrians and Dogs', *Wildlife Society Bulletin (1973-2006)*, vol. 29, no. 1, pp. 124-32.
- Morales, PC 1997, 'Grieving in silence: The loss of companion animals in modern society', *Journal of Personal and Interpersonal Loss*, vol. 2, no. 3, pp. 243-54.
- Morey, D 2010, *Dogs: domestication and development of a social bond*, Cambridge University Press, New York.
- Mornington Peninsula Shire Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 22 January 2014, <personal communication>.
- Morrongiello, BA, Schwebel, DC, Stewart, J, Bell, M, Davis, AL & Corbett, MR 2013, 'Examining parents' behaviors and supervision of their children in the presence of an unfamiliar dog: Does The Blue Dog intervention improve parent practices?', *Accident Analysis & Prevention*, vol. 54, pp. 108-13.
- Nabi, RL 1998, 'The effect of disgust-eliciting visuals on attitudes toward animal experimentation', *Communication Quarterly*, vol. 46, no. 4, pp. 472-84.
- Næss, P 2001, 'Urban Planning and Sustainable Development', *European Planning Studies*, vol. 9, no. 4, pp. 503-24.
- Nightingale, F 1860, *Notes on Nursing: what it is, and what it is not*, viewed 5 April 2013, <<http://manybooks.net/titles/nightingalef1736617366-8.html>>.
- Nillumbik Shire Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 23 January 2014, <personal communication>.
- Nussbaum, M 2006, *Frontiers of Justice: Disability, Nationality, Species membership*, Belknap Harvard University Press, Cambridge, Massachusetts.
- 2011, *Creating Capabilities: The Human Development Approach*, Belknap Harvard University Press, Cambridge, Massachusetts.
- Nussbaum, M & Sen, A (eds) 1993, *The Quality of Life*, Oxford University Press, Oxford.
- O'Haire, M 2010, 'Companion animals and human health: Benefits, challenges, and the road ahead', *Journal of Veterinary Behavior: Clinical Applications and Research*, vol. 5, no. 5, pp. 226-34.
- Ojalamm, S & Blomley, N 2015, 'Dancing with wolves: Making legal territory in a more-than-human world', *Geoforum*, vol. 62, no. 0, pp. 51-60.
- Olsen, P 2009, 'Animal insurance and the veterinary profession – The Swedish example [conference proceeding]', paper presented to Federation of Veterinarians of Europe, Stockholm, Sweden, 22-23 May.
- Opotow, S 1993, 'Animals and the Scope of Justice', *Journal of Social Issues*, vol. 49, no. 1, pp. 71-85.
- Orwell, G 1987, *Animal Farm*, Penguin Books, London.
- Owens, S & Cowell, R 2011, *Land and limits: Interpreting sustainability in the planning process*, 2nd ed., Routledge, Abingdon, Oxford.
- Owens, S, Rayner, T & Bina, O 2004, 'New agendas for appraisal: reflections on theory, practice, and research', *Environment and Planning A*, vol. 36, no. 11, pp. 1943-59.

- Palluzi, L 2013, 'Four-legged Tenants: Encouraging Pet-Friendly Housing While Protecting Landlords from Liability', *Mid-Atlantic Journal on Law and Public Policy*, vol. 2, pp. 101-16.
- Parslow, RA & Jorm, AF 2003a, 'The impact of pet ownership on health and health service use: Results from a community sample of australians aged 40 to 44 years', *Anthrozoos*, vol. 16, no. 1, pp. 43-56.
- 2003b, 'Pet ownership and risk factors for cardiovascular disease: Another look', *Medical Journal of Australia*, vol. 179, no. 9, pp. 466-8.
- Parslow, RA, Jorm, AF, Christensen, H, Rodgers, B & Jacomb, P 2005, 'Pet ownership and health in older adults: Findings from a survey of 2,551 community-based australians aged 60-64', *Gerontology*, vol. 51, no. 1, pp. 40-7.
- Passmore, J 1975, 'The Treatment of Animals', *Journal of the History of Ideas*, vol. 36, no. 2, pp. 195-218.
- Philo, C 1995, 'Animals, Geography, and the City: Notes on Inclusions and Exclusions', *Environment and Planning D: Society and Space*, vol. 13, no. 6, pp. 655-81.
- Philo, C & Wilbert, C 2000, 'Animal spaces, beastly places: an introduction', in C Philo & C Wilbert (eds), *Animal spaces, beastly places: new geographies of human-animal relations*, Routledge, London, pp. 1-37.
- Pongrácz, P, Molnár, C & Miklósi, Á 2010, 'Barking in family dogs: An ethological approach', *The Veterinary Journal*, vol. 183, no. 2, pp. 141-7.
- Power, E 2008, 'Furry families: making a human-dog family through home', *Social & Cultural Geography*, vol. 9, no. 5, pp. 535-55.
- 2013, 'Dogs and Practices of Community and Neighboring', *Anthrozoos*, vol. 26, no. 4, pp. 579-91.
- Radimer, KL, Olson, CM & Campbell, CC 1990, 'Development of Indicators to Assess Hunger', *The Journal of Nutrition*, vol. 120, no. 11 Suppl, pp. 1544-8.
- Raglus, TI, De Groef, B & Marston, LC 2015, 'Can bark counter collars and owner surveys help identify factors that relate to nuisance barking? A pilot study', *Journal of Veterinary Behavior: Clinical Applications and Research*, vol. 10, no. 3, pp. 204-9.
- Rawls, J 1999, *A Theory of Justice*, Belknap Harvard University Press, Massachusetts.
- Raz, J 1986, *The Morality of Freedom*, Clarendon Press, Oxford.
- Regan, T 1985, 'The Case for Animal Rights', in P Singer (ed.), *In Defence of Animals*, Basil Blackwell, Oxford, pp. 13-26.
- Rew, L 2000, 'Friends and Pets as Companions: Strategies for Coping With Loneliness Among Homeless Youth', *Journal of Child and Adolescent Psychiatric Nursing*, vol. 13, no. 3, pp. 125-32.
- Richardson, T & Connelly, S 2013, 'Reinventing public participation: Planning in the age of consensus', in P Blundell-Jones, D Petrescu & J Till (eds), *Architecture and Participation*, Taylor and Francis, Hoboken, pp. 77-104, DOI 10.4324/9780203022863, via Scopus.
- Richmond, R 2013, 'Pet ownership in Australia', *Australian Veterinary Journal*, vol. 91, no. 11, p. N2.
- Rijken, M & van Beek, S 2011, 'About Cats and Dogs ... Reconsidering the Relationship Between Pet Ownership and Health Related Outcomes in Community-Dwelling Elderly', *Social Indicators Research*, vol. 102, no. 3, pp. 373-88.
- Rittel, HWJ & Webber, MM 1973, 'Dilemmas in a General Theory of Planning', *Policy Sciences*, vol. 4, pp. 155-69.

- Robertson, ID, Irwin, PJ, Lymbery, AJ & Thompson, RCA 2000, 'The role of companion animals in the emergence of parasitic zoonoses', *International Journal for Parasitology*, vol. 30, no. 12–13, pp. 1369-77.
- Robinson, J 2011, 'Cities in a World of Cities: The Comparative Gesture', *International Journal of Urban and Regional Research*, vol. 35, no. 1, pp. 1-23.
- Rock, MJ, Graham, TM, Massolo, A & McCormack, GR 2016, 'Dog-walking, dog-fouling and leashing policies in urban parks: Insights from a natural experiment designed as a longitudinal multiple-case study', *Landscape and Urban Planning*, vol. 153, pp. 40-50.
- Rohlf, VI, Bennett, PC, Toukhsati, S & Coleman, G 2010, 'Why Do Even Committed Dog Owners Fail to Comply with Some Responsible Ownership Practices?', *Anthrozoos*, vol. 23, no. 2, pp. 143-55.
- Rolston, H, III. 1998, 'Challenges in environmental ethics', in ME Zimmermann, JB Callicott, G Sessions, KJ Warren & J Clark (eds), *Philosophy: From animal rights to radical ecology*, Prentice Hall, Upper Saddle River, New Jersey, pp. 124-44.
- Rowlands, M 1997, 'Contractarianism and Animal Rights', *Journal of Applied Philosophy*, vol. 14, no. 3, pp. 235-47.
- RSPCA Australia 2014, *RSPCA Approved Farming Scheme Standards: Operations Manual*, RSPCA Australia, viewed 19 November 2014, <http://rspca.org.au/sites/default/files/website/what-we-do/working-with-farming-industry/AFS_Operations_Manual_Feb2014.pdf>.
- Ryder, RD 2006, 'Speciesism in the Laboratory', in P Singer (ed.), *In Defense of Animals: the second wave*, Blackwell, Massachusetts, pp. 87-103.
- Sager, T 2009, 'Responsibilities of theorists: The case of communicative planning theory', *Progress in Planning*, vol. 72, no. 1, pp. 1-51.
- Salman, MD, New, JJG, Scarlett, JM, Kass, PH, Ruch-Gallie, R & Hetts, S 1998, 'Human and Animal Factors Related to Relinquishment of Dogs and Cats in 12 Selected Animal Shelters in the United States', *Journal of Applied Animal Welfare Science*, vol. 1, no. 3, pp. 207-26.
- Sanders, C 2003, 'Actions Speak Louder than Words: Close Relationships between Humans and Nonhuman Animals', *Symbolic Interaction*, vol. 26, no. 3, pp. 405-26.
- Sanders, J 2011, 'Animal Trouble and Urban Anxiety: Human–Animal Interaction in Post–Earth Day Seattle', *Environmental History*, vol. 16, no. 2, pp. 226-61.
- Schlacher, T, Weston, M, Lynn, D, Schoeman, D, Huijbers, C, Olds, A, Masters, S & Connolly, R 2015, 'Conservation gone to the dogs: when canids rule the beach in small coastal reserves', *Biodiversity and Conservation*, vol. 24, no. 3, pp. 493-509.
- Sen, A 1985, 'Well-Being, Agency and Freedom: The Dewey Lectures 1984', *The Journal of Philosophy*, vol. 82, no. 4, pp. 169-221.
- 2009, *The Idea of Justice*, Belknap Harvard University Press, Massachusetts.
- Serpell, J 1991, 'Beneficial effects of pet ownership on some aspects of human health and behaviour', *Journal Of The Royal Society Of Medicine*, vol. 84, no. 12, pp. 717-20.
- 1996, 'Evidence for an association between pet behavior and owner attachment levels', *Applied Animal Behaviour Science*, vol. 47, no. 1–2, pp. 49-60.
- 2000, 'Animal companions and human well-being: an historical exploration of the value of human-animal relationships', in AH Fine (ed.), *Handbook on Animal-*

- Assisted Therapy: Theoretical foundations and guidelines for practice*, Academic Press, San Diego, California, pp. 3-20.
- Shapiro, KJ 1990, 'Understanding Dogs Through Kinesthetic Empathy, Social Construction, and History', *Anthrozoos*, vol. 3, no. 3, pp. 184-95.
- Shipley, R & Newkirk, R 1999, 'Vision and visioning in planning: what do these terms really mean?', *Environment and Planning B: Planning and Design*, vol. 26, pp. 573-92.
- Shore, ER, Petersen, CL & Douglas, DK 2003, 'Moving As a Reason for Pet Relinquishment: A Closer Look', *Journal of Applied Animal Welfare Science*, vol. 6, no. 1, pp. 39-52.
- Shyan, MR, Fortune, KA & King, C 2003, '"Bark parks" - A study on interdog aggression in a limited-control environment', *Journal of Applied Animal Welfare Science*, vol. 6, no. 1, pp. 25-32.
- Siegel, JM, Angulo, FJ, Detels, R, Wesch, J & Mullen, A 1999, 'AIDS diagnosis and depression in the Multicenter AIDS Cohort Study: The ameliorating impact of pet ownership', *AIDS Care*, vol. 11, no. 2, pp. 157-70.
- Simon, L 1984, 'The Pet Trap: Negative effects of pet ownership on families and individuals', in RK Anderson, BL Hart & LA Hart (eds), *The Pet Connection: Its influence on Our Health and Quality of Life*, University of Minnesota, Minneapolis, pp. 226-40.
- Singer, P 1985, 'Ethics and the New Animal Liberation Movement', in P Singer (ed.), *In Defence of Animals*, Basil Blackwell, Oxford, pp. 1-10.
- 2009, *Animal Liberation*, HarperCollins Publishers, New York.
- 2012, 'All animals are equal', *Ethical Theory: An Anthology*, p. 361.
- Sköllerhorn, E 1998, 'Habermas and Nature: The Theory of Communicative Action for Studying Environmental Policy', *Journal of Environmental Planning and Management*, vol. 41, no. 5, pp. 555-73.
- Smith, K 2008, 'Animals and the social contract: A reply to Nussbaum', *Environmental ethics*, vol. 30, no. 2, pp. 195-207.
- Snowden, LR 2005, 'Racial, Cultural and Ethnic Disparities in Health and Mental Health: Toward Theory and Research at Community Levels', *American Journal of Community Psychology*, vol. 35, no. 1-2, pp. 1-8.
- Sorabji, R 1993, *Animal Minds and Human Morals: The Origins of the Western Debate*, Gerald Duckworth and Company, London.
- Staeheli, L 2003, 'Cities and Citizenship', *Urban Geography*, vol. 24, no. 2, pp. 97-102.
- Stake, RE 2000, 'Case Studies', in N Denzin & Y Lincoln (eds), *Handbook of Qualitative Research*, 2nd ed., Sage Publications, Thousand Oaks, pp. 435-54.
- State Government of Victoria 2008, *Melbourne 2030: a planning update: Melbourne @ 5 million*, viewed 30 April 2013, <http://www.dpcd.vic.gov.au/planning/publicationsandresearch/reports-and-consultation-documents#Melbourne_2030_a_planning_update>.
- 2013, *Victoria Planning Provisions*, viewed 30 April 2013, <http://planningschemes.dpcd.vic.gov.au/VPPs/combinedPDFs/VPPs_All_Clauses.pdf>.
- 2014, *Plan Melbourne*, State Government of Victoria, Melbourne.
- 2015, *Know Your Council*, State Government of Victoria, viewed 16 December 2015, <https://knowyourcouncil.vic.gov.au/compare-councils?service_area_key=animal_management>.

- 2016, *Amendments - Planning Schemes Online*, Department of Environment, Land, Water and Planning, viewed 10 August 2016, <<http://planning-schemes.delwp.vic.gov.au/updates-and-amendments#>>.
- State Government of Victoria, Legislative Council 1987, 'Parliamentary Debates', in 24 March, vol. 386, pp. 491-4.
- Steele, W, Maccallum, D, Byrne, J & Houston, D 2012, 'Planning the Climate-just City', *International Planning Studies*, vol. 17, no. 1, pp. 67-83.
- Stein, E 1996, *Without good reason: the rationality debate in philosophy and cognitive science*, Clarendon Press, Oxford.
- Stein, L 2008, *Principles of Planning Law*, Oxford University Press, South Melbourne.
- Stoecker, R 2013, *Research Methods for Community Change: a project-based approach*, Sage Publications, Thousand Oaks.
- Stoett, PJ 2005, 'Of Whales and People: Normative Theory, Symbolism, and the IWC', *Journal of International Wildlife Law & Policy*, vol. 8, no. 2-3, pp. 151-75.
- Tardona, DR 2012, 'Promoting Companion Animal Leash Compliance on an Urban Park Trail System', *Natural Areas Journal*, vol. 32, no. 2, pp. 215-7.
- Tarsitano, E 2006, 'Interaction between the environment and animals in urban settings: Integrated and participatory planning', *Environmental Management*, vol. 38, no. 5, pp. 799-809.
- Tassy, S, Oullier, O, Mancini, J & Wicker, B 2013, 'Discrepancies between judgment and choice of action in moral dilemmas', *Frontiers in Psychology*, vol. 4, pp. 1-8.
- Taylor, N 1980, 'Planning Theory and the Philosophy of Planning', *Urban Studies*, vol. 17, no. 2, pp. 159-72.
- Tewdwr-Jones, M & Allmendinger, P 1998, 'Deconstructing communicative rationality: a critique of Habermasian collaborative planning', *Environment and Planning A*, vol. 30, no. 11, pp. 1975-89.
- Thompson, D (ed.) 1995, *The Concise Oxford Dictionary of Current English*, 9th edn, Oxford University Press, Oxford.
- Tissot, S 2011, 'Of Dogs and Men: The Making of Spatial Boundaries in a Gentrifying Neighborhood', *City & Community*, vol. 10, no. 3, pp. 265-84.
- Toohy, AM & Rock, MJ 2015, 'Newspaper Portrayals, Local Policies, and Dog-Supportive Public Space: Who's Wagging Whom?', *Anthrozoos*, vol. 28, no. 4, pp. 549-67.
- Tyler, T 2009, 'If horses had hands...', in T Tyler & R Manuela (eds), *Animal Encounters*, Brill, The Netherlands, pp. 11-26.
- United Nations 2007, *Indicators of Sustainable Development: Guidelines and Methodologies (methodology sheets): 3rd ed.*, viewed 20 June 2014, <<http://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=108&menu=920>>.
- Urbanik, J & Morgan, M 2013, 'A tale of tails: The place of dog parks in the urban imaginary', *Geoforum*, vol. 44, pp. 292-302.
- Utz, RL 2013, 'Walking the Dog: The Effect of Pet Ownership on Human Health and Health Behaviors', *Social Indicators Research*, pp. 1-13.
- van Bueren, EML & Blom, EM 1997, *Hierarchical framework for the formulation of sustainable forest management standards*, Tropenbos Foundation, Wageningen.
- van der Helm, R 2009, 'The vision phenomenon: Towards a theoretical underpinning of visions of the future and the process of envisioning', *Futures*, vol. 41, no. 2, pp. 96-104.

- Varsanyi, MW 2006, 'Interrogating "Urban Citizenship" vis-à-vis Undocumented Migration', *Citizenship Studies*, vol. 10, no. 2, pp. 229-49.
- Veevers, JE 1985, 'The Social Meaning of Pets', in M Sussman (ed.), *Pets and the Family*, The Haworth Press, New York, pp. 11-30, viewed 2013/04/04, DOI 10.1300/J002v08n03_03, <http://www.tandfonline.com/doi/abs/10.1300/J002v08n03_03>.
- Victorian Animal Aid 2009, *Meet Your Match Launch (30 March 2009)*, viewed 2 February 2015, <<http://animalaid.org.au/meet-your-match-launch.html>>.
- Victorian Civil and Administrative Tribunal 2015a, *How VCAT resolves cases*, viewed 29 October 2015, <<https://www.vcat.vic.gov.au/about-vcat/how-vcat-resolves-cases>>.
- 2015b, *Who we are*, viewed 29 October 2015, <<https://www.vcat.vic.gov.au/about-vcat/who-we-are-0>>.
- Victorian Injury Surveillance Unit 2009, *Unintentional dog bite injury in Victoria: 2005-7*, Monash University Accident Research Centre, Melbourne, <https://www.monash.edu/_data/assets/pdf_file/0005/218426/haz69.pdf>.
- Waldron, J 2003, 'Who Is My Neighbor?: Humanity and Proximity', *The Monist*, vol. 86, no. 3, pp. 333-54.
- Walmsley, A 2006, 'Greenways: multiplying and diversifying in the 21st century', *Landscape and Urban Planning*, vol. 76, no. 1-4, pp. 252-90.
- Walsh, F 2009a, 'Human-animal bonds I: The relational significance of companion animals', *Family Process*, vol. 48, no. 4, pp. 462-80.
- 2009b, 'Human-Animal Bonds II: The Role of Pets in Family Systems and Family Therapy', *Family Process*, vol. 48, no. 4, pp. 481-99.
- Walsh, P & Mertin, P 1994, 'The Training of Pets as Therapy Dogs in a Women's Prison: A Pilot Study', *Anthrozoos*, vol. 7, no. 2, pp. 124-8.
- Ward-Thompson, C 2002, 'Urban open space in the 21st century', *Landscape and Urban Planning*, vol. 60, no. 2, pp. 59-72.
- Wemelsfelder, F 1985, 'Animal Boredom: Is a scientific study of the subjective experiences of animals possible?', in MW Fox & LD Mickley (eds), *Advances in Animal Welfare Science 1984*, Springer, Netherlands, vol. 1, pp. 115-54, DOI 10.1007/978-94-009-4998-0_11, <http://dx.doi.org/10.1007/978-94-009-4998-0_11>.
- Werkheiser, I 2015, 'Fighting Nature: An Analysis and Critique of Breed-Specific Flourishing Arguments for Dog Fights', *Society & Animals*, vol. 23, no. 5, pp. 502-20.
- Weston, MA, Fitzsimons, JA, Wescott, G, Miller, KK, Ekanayake, KB & Schneider, T 2014, 'Bark in the Park: A Review of Domestic Dogs in Parks', *Environmental Management*, vol. 54, no. 3, pp. 373-82.
- Whatmore, S 2002, 'Geographies of/for a More Than Human World', in *Hybrid geographies: Natures cultures spaces*, Sage Publications, London.
- Wheeler, SM, Randolph, J & London, JB 2009, 'Shaken, shrinking, hot, impoverished and informal: Emerging research agendas in planning', *Progress in Planning*, vol. 72, no. 4, pp. 210-22.
- Whittemore, AH 2014, 'Phenomenology and City Planning', *Journal of Planning Education and Research*, vol. 34, no. 3, pp. 301-8.
- Williams, J, Muldoon, J & Lawrence, A 2010, 'Children and their pets: Exploring the relationships between pet ownership, pet attitudes, attachment to pets and empathy', *Education & Health*, vol. 28, no. 1, pp. 12-5.

- Williams, K, Weston, MA, Henry, S & Maguire, GS 2009, 'Birds and Beaches, Dogs and Leashes: Dog Owners' Sense of Obligation to Leash Dogs on Beaches in Victoria, Australia', *Human Dimensions of Wildlife*, vol. 14, no. 2, pp. 89-101.
- Winefield, HR, Black, A & Chur-Hansen, A 2008, 'Health effects of ownership of and attachment to companion animals in an older population', *International Journal of Behavioral Medicine*, vol. 15, no. 4, pp. 303-10.
- Wolch, J 1996, 'Zoöpolis', *Capitalism Nature Socialism*, vol. 7, no. 2, pp. 21-47.
- 2002, 'Anima urbis', *Progress in Human Geography*, vol. 26, no. 6, pp. 721-42.
- Wolf, CA, Lloyd, JW & Black, JR 2008, 'An examination of US consumer pet-related and veterinary service expenditures, 1980–2005', *Journal of the American Veterinary Medical Association*, vol. 233, no. 3, pp. 404-13.
- Wolff, J & de-Shalit, A 2007, *Disadvantage*, Oxford University Press, New York.
- Wood, L (ed.) 2009, *Living well together: how companion animals can help strengthen social fabric*, Petcare Information and Advisory Service and University of Western Australia.
- Wood, L, Giles-Corti, B & Bulsara, M 2005, 'The pet connection: Pets as a conduit for social capital?', *Social Science and Medicine*, vol. 61, no. 6, pp. 1159-73.
- World Organisation for Animal Health 2012, *Terrestrial Animal Health Code (2012)*, viewed 15 April 2013, <<http://www.oie.int/en/international-standard-setting/terrestrial-code/>>.
- Wyndham City Council 2013, *Domestic Animal Management Plan 2013-2016*, viewed 18 July 2013, <<http://www.wyndham.vic.gov.au/aboutwyndham/planspolicieslocallaws/locallaws/domesticanimal>>.
- Yarra Ranges Council 2013, *Domestic Animal Management Plan 2013-2017*, viewed 21 January 2014, <http://www.yarraranges.vic.gov.au/Residents/Animals/Domestic_Animal_Management_Plan_2013_-_2017>.
- Yin, R 2009, *Case study research: design and methods*, Sage Publications, Thousand Oaks.
- Yin, S & McCowan, B 2004, 'Barking in domestic dogs: context specificity and individual identification', *Animal Behaviour*, vol. 68, no. 2, pp. 343-55.
- Yuen, B, Yeh, A, Appold, SJ, Earl, G, Ting, J & Kwee, LK 2006, 'High-rise living in Singapore public housing', *Urban Studies*, vol. 43, no. 3, pp. 583-600.
- Zasloff, RL & Kidd, AH 1994, 'Loneliness and pet ownership among single women', *Psychological Reports*, vol. 75, no. 2, pp. 747-52.
- Zimolag, U & Krupa, T 2009, 'Pet ownership as a meaningful community occupation for people with serious mental illness', *American Journal of Occupational Therapy*, vol. 63, no. 2, pp. 126-37.

16. APPENDICES

Appendix 1: Findings in sequential order

1: Ontology of functioning	In his work on comparative research, Hall (2003) finds that ontology and methodology are inseparable. My research finds that this same principle applies when trying to describe councils and the plurality of worldviews underpinning how they plan different aspects of their work. Further, my research suggests that the tension between animal management and open space planners in some councils is an outworking of different ontologies and is therefore particularly complicated to address in practice (page 150).
2: Uniformity of the Domestic Animal Management Plan	The Domestic Animal Management Plan ('DAMP') is prescribed by the Victorian government to uniformly direct animal management planning across all metropolitan and rural councils in Victoria on subjects of interest to the state; however animal management is a localised function in both theory and practice under the <i>Domestic Animals Act 1994</i> (Vic.) and calibrated to the local context through local laws. The DAMP is fundamentally a confused document, with a peculiar focus on state-based issues whereas the animal management function is embedded in the local context. I contend that this disconnect substantially reduces the relevance of the DAMP to councils (page 166).
3: Commitment to the Domestic Animal Management Plan	The lack of relevance of the DAMP to councils in general leads to a lack of commitment to the DAMP action plans by councils. The four year plans are over-engineered on the basis that councils rarely commit financial or other resources to support the plan on inception nor do they generally do so down the track, making the DAMP action plans largely undeliverable (page 168).
4: Relationship between local and Victorian governments in relation to animal management	Lacking both relevance and commitment, the DAMP is seen as only a statutory requirement by many councils. Councils feel they have little opportunity for meaningful contribution and input into any state-level policy development processes, thus reducing any ownership of the DAMP which ostensibly reflects the Victorian government's position on what to focus on. Much of this appears to arise from a disparity between DEPI's perceived role and its actual role and, overall, this is seen to contribute to a commonly neutral-to-negative view held by councils of the role of DEPI in animal management (page 171).
5: Excessive differentiation in regulations between councils	There is unnecessary complication in animal management introduced by excessive local differentiation of regulations relating to the management of dogs throughout Melbourne. This leads to confusion in the community of what the local regulations and ordinances are in respect to dog management and adds a barrier to transferability of animal management officer resources and skills across metropolitan councils. Both welfare and outcomes for dogs can then suffer as a result of poorer perceptions of dogs in the community (page 177).

6: Expectations of effective control regulation	The <i>Domestic Animals Act 1994</i> (Vic.) and local laws at councils introduce the unclear concept of 'effective control' that is extremely difficult to interpret and enforce in a consistent way. Effective control is an important principle that is referred to in the Act however it is left to councils to specify how that concept is defined for their communities through their various local laws. This leads to a variety of interpretations and expectations of councils and in the community in regards to both the definition and enforcement of effective control. That effective control is rarely enforced in its own right contributes to a disparity in expectations between council and community that potentially impacts the broader perception of dogs in the community. Furthermore, that effective control is rarely enforced in practice leads to questioning whether it belongs in legislation in the first place (page 179).
7: Expectations of barking dog regulation	The <i>Domestic Animals Act 1994</i> (Vic.) introduces a number of unclear concepts that are extremely difficult to interpret in a consistent way. A barking dog is an offence under section 32 of the Act when it is deemed to cause a 'nuisance' to humans. What comprises a nuisance subjectively varies based on any number of individual and environmental parameters. Curiously however, councils appear to have far more success in enforcing a barking dog complaint than enforcing effective control despite what appear similarly vague definitions that rely on an essentially interpretative enforcement process. I argue that a focus on a consistent enforcement process rather than outcomes is what appears to differentiate the success of barking dogs to the lack of success of effective control. This consistency in process helps to better align council and community expectations, thereby improving the perception of dogs in the community (page 184).
8: State-run community education programs into safety around dogs and the role of councils	With ever-increasing population densities in urban areas, humans will encounter an increasing number of dogs in public open space and the broader public realm, and encounter dogs more often than in the past. Community education on safety around dogs therefore plays an increasingly important role. Aside from a suite of school programs, DEPI does not run safety programs for the broader community; rather, DEPI instead relies on councils to implement their compliance education programs in order to manage the risk of dog bite posed to the broader community. I argue that this risk to the community of dog bite is presently inadequately managed by DEPI and that both the councils and DEPI need to work together to develop broader community education programs that better address the safety issues around dogs (page 191).
9: State-run community education programs into safety around dogs and the role of animal welfare agencies	In most circumstances, the education and advice provided by major animal welfare organisations ought to be strongly aligned with the message DEPI would like to communicate. However, animal welfare organisations (particularly those with their own shelters) potentially experience a conflict of interest when providing prospective dog owners with educational advice on appropriateness of a particular breed or dog for an individual's lifestyle since they would like to re-home as many animals as they can. DEPI is in a more objective position to provide such advice and a community education program could communicate such advice to the broader community (page 193).

10: Improving dog owners' compliance	Dog owners can act to improve the compliance in the community in two ways: passive responses attempt to improve the perception of dogs in the community by isolated, individual action, whereas active responses attempt to improve the compliance of dog owners in the community through peer education and pressure. In order to effect real and lasting change in community behaviours, a peer education and pressure model is suggested as being more effective than artificially improving compliance rates through temporarily adjusting the perception of the community. The educational model can also be council-run (page 207).
11: Expectations of default off-leash ordinances	Default off-leash ordinances are commonly found in rural communities. These are not aligned with the expectations held by an urbanised community of how dogs and dog owners ought to behave. This lack of alignment makes them both difficult to understand and difficult to comply with in urban environments which in turn jeopardises the efficacy of any enforcement action (page 210).
12: Reliance on borrowed amenity	Reliance on borrowed amenity exposes a council to counterparty risks which need to be appropriately managed to ensure a continuity of adequate public open space availability for residents and visitors. These risks are generally poorly understood by open space planners in council and thus left largely unmitigated by controls. An over-reliance on such resources then can lead to an undersupply of public open space should an external stakeholder decommission a space for maintenance or other reasons. Compounding these problems is a lack of regular forums for planners to communicate with neighbouring counterparts concerning public open space issues (page 220).
13: Planning of borrowed amenity	Open space planners sometimes acknowledge the existence of neighbouring public open space and other incumbent land of state statutory authorities when planning their public open space, however they generally fail to acknowledge the planning of that same space. This omission exposes the council to vulnerability where those plans alter the availability of that neighbouring public open space which the council has failed to take into account (page 220).
14: Human agency in planning amenity for dogs	Human agency plays a fundamental role in the practice of planning public open space for dogs. This is a manifestation of speciesism and presents a barrier for planners wanting to increase the amenity for dogs. The planning which they do is ostensibly for the benefit of humans that own dogs, not the benefit of the dogs themselves. Examples include: • Runt space • Primacy of function on space • Decisions to implement dog parks (page 228).
15: Dog parks as desirable but unnecessary amenity for dogs	Dog parks are perceived by some councils to be for the exclusive use of dogs and their owners. This is shown to generally be the case, however the cause for the exclusion appears to be a product of the dog park's location and lack of amenity for humans, leading to a less attractive space which humans otherwise choose not to visit unless they have a dog. Dogs and dog owners are the primary users of the dog park, however this is not necessarily to the exclusion of all others and it is incorrect for councils or the community to assert otherwise (page 228).

16: Dual interpretations of fencing	Fencing introduces dual interpretations of open space: • Inclusive-Exclusive dualism: On the one hand, fences may make open space more inclusive as they allow a number of otherwise conflicting activities to take place simultaneously. On the other hand, fences may make open space feel exclusionary as they segregate particular spaces for certain activities to the actual or perceived exclusion of all other activities. • Accessibility dualism: Fencing demarks nature from the urban and affects the flow of open space. Fencing can make a park more desirable, improving the accessibility of the park. However, fencing can be perceived as artificially cluttering the natural environment, making the space less desirable and consequently less accessible. • Compliance dualism: Fencing increases the amenity of a space for dog owners that desire fenced areas to exercise their dogs with fencing being seen as a reward for responsible dog ownership. Fencing also encourages some dog owners to become less vigilant in compliance, in particular relaxing the requirement to keep their dog under effective control, thereby encouraging irresponsible dog ownership. These dualisms allow the planner to pause and reflect on where they stand on more fundamental questions of speciesism and planning for dogs, allowing them to plan for dogs with greater mindfulness (page 240).
17: Anthropocentrism and urban planning	Urban planning in Victoria is a profession which considers itself largely overburdened from expansion of its original remit. Four sequential hurdles are encountered by planners in considering the inclusion of dogs as subjects of urban planning: 1. Speciesist hierarchy – consideration of human needs come first at all times. 2. Universality – not everybody owns a dog, so why should they be planned for? 3. Species ranking – at what point should interest in other species commence? 4. Human agency of dog owners – where the needs of dog owners are taken as a proxy for the needs of dogs. Since dogs are required to meet more stringent conditions than humans in order to be afforded consideration by urban planners, in particular the need for universality, they are efficiently blocked from consideration by urban planners at any one of these hurdles. (page 259).

Table 22: Findings from this study in sequential order (source: author).

Appendix 2: Recommendations in sequential order

1: Domestic Animal Management Plan	The DAMP content should be less prescriptive than outlined in section 68A of the <i>Domestic Animals Act 1994</i> (Vic.), instead inviting councils to prioritise the areas of focus themselves rather than rely on state-level areas of focus that may not be as relevant to their local situation or context (page 174).
2: Clarification of animal management roles and responsibilities	Through consultation with councils, I recommend that the Bureau of Animal Welfare develop a service charter or statement that details what the Bureau's role and responsibilities are in relation to domestic animal management and how those are distinct from the council's role and responsibilities. This will then make clear to councils and DEPI what the Bureau does do and doesn't do and, having clarified mutual expectations, both DEPI and councils can better resource animal management functions accordingly (page 175).
3: Regional project officer appointments	I recommend that DEPI appoints a number of regional project officers to work full-time from a number of 'host' councils located around Melbourne to improve the sharing of information and knowledge and foster stronger working relationships between DEPI and councils. If the program is deemed successful, it can be rolled out regionally in time as resources allow. Whilst they remain DEPI employees, these project officers could be funded in part by a levy on councils, as the officers are there to support councils in a particular region as shared animal management project officers (page 175).
4: Recasting of effective control regulation	Effective control is situated in the <i>Domestic Animals Act 1994</i> (Vic.) and therefore it must be able to be complied with and ultimately enforceable. Effective control is aligned with an educational rather than compliance-based approach and therefore its inclusion in the Act and local laws should reflect an educational rather than compliance approach (page 183).
5: Community education program development	In order to address the risk of dog bite, I recommend that DEPI develops a community education program that addresses the broader community, both dog owners and non-dog owners, on issues of how to appropriately behave when encountering dogs in public open space and the broader public realm. Supplementing this program, in order to address the problem of inappropriate breed selection, I recommend that DEPI develops a community education program for prospective dog owners to encourage appropriate breed selection for lifestyle. These programs should reduce the risk of dog bite and other nuisance in the community with more responsible dog ownership and greater awareness in the community of how to act around dogs safely. In turn, the perception of dogs more generally ought to improve, leading to better access to opportunities for amenity for dogs (page 196).

6: Public open space planning forums	Open space planners at councils need to establish forums through which they communicate with their counterparts at neighbouring councils about plans for public open space in their municipality. Such forums, if taking place at an appropriately regular interval, then mitigate some of the risk associated with reliance on borrowed amenity, providing an opportunity for affected councils to plan for contingencies in coordination with their neighbouring councils. In order to maintain relevance, these forums ideally need to be tailored to the interests of all attendees and so may need to be smaller and more specific rather than larger and more generic. State bodies could attend by invitation or distribute information separately for discussion by councils (page 225).
--------------------------------------	--

Table 23: Recommendations from this study in sequential order (source: author).

Appendix 3: List of institutional documentary sources: selected metadata

Council	Date	Type	Description
BAYS	19/05/2009	Agenda	Bayside Open Space Strategy – Consultant Brief
BAYS	19/05/2009	Agenda	Use of council reserves by commercial providers
BAYS	16/06/2009	Agenda	Conservation in George Street Reserve
BAYS	21/07/2009	Agenda	Mandatory desexing and compulsory confinement of cats
BAYS	20/10/2009	Agenda	Proposed fence alignment, Elsternwick Park
BAYS	17/11/2009	Agenda	Mandatory desexing and compulsory confinement of cats
BAYS	15/12/2009	Agenda	Sportsground strategy
BAYS	15/12/2009	Agenda	Open Space Strategy Consultation – Methodology focus group
BAYS	13/04/2010	Agenda	Proposed fence alignment, Elsternwick Park
BAYS	04/05/2010	Minutes	Proposed fence alignment, Elsternwick Park
BAYS	28/09/2010	Agenda	Elsternwick Park off-leash
BAYS	26/10/2010	Agenda	Open Space Consultation Progress (interpreted by council)
BAYS	26/10/2010	Papers	Open Space Strategy Consultation: Scoping Paper
BAYS	13/12/2010	Agenda	Bayside 2020 Community Plan – consultation draft
BAYS	08/02/2011	Agenda	Elsternwick Park off-leash
BAYS	08/02/2011	Papers	Elsternwick Park @Leisure Report
BAYS	08/03/2011	Agenda	Open Space Strategy: Endorsement and Adoption
BAYS	14/06/2011	Minutes	Castlefield Reserve – Petition
BAYS	14/06/2011	Papers	Post-burn fire management
BAYS	14/06/2011	Papers	Post-burn fire management
BAYS	12/07/2011	Minutes	Hampton East Off-Leash Review – Petition and Outcome
BAYS	02/08/2011	Agenda	Castlefield Reserve – Rejection by Council
BAYS	02/08/2011	Minutes	Castlefield Reserve – Two motions
BAYS	02/08/2011	Agenda	Domestic Animal Management Plan – consultation and engagement strategy
BAYS	13/09/2011	Agenda	Strategic priorities
BAYS	13/09/2011	Papers	Planning scheme review report
BAYS	19/09/2011	Plan	Bayside 2020 Community Plan
BAYS	13/03/2012	Papers	Public Toilet Strategy
BAYS	10/04/2012	Strategy	Bayside Open Space Strategy
BAYS	14/08/2012	Papers	Revision to draft Open Space Strategy – Suburb Analysis and Action Plan
BAYS	14/08/2012	Agenda	Domestic Animal Management Plan
BAYS	14/08/2012	Agenda	Domestic Animal Management Plan adoption
BAYS	11/09/2012	Minutes	Bayside 2020 Community Plan Summit
BAYS	27/11/2012	Agenda	Cheltenham Park
BAYS	18/12/2012	Papers	Bayside Coastal Management Policy – Themes
BAYS	19/02/2013	Agenda	Ricketts Point
BAYS	19/02/2013	Agenda	Heath and wellbeing plan – annual update (extract)
BAYS	30/04/2013	Agenda	Active by the bay recreation strategy 2013-2022
BAYS	25/06/2013	Agenda	Active by the bay recreation strategy – Feedback
BAYS	30/07/2013	Agenda	Health and wellbeing plan – goals and objectives (draft)
BAYS	13/08/2013	Papers	Cheltenham Park
BAYS	14/08/2013	Strategy	Active by the Bay recreation strategy
BAYS	27/08/2013	Papers	Cheltenham Park
BAYS	24/09/2013	Agenda	Open Space Strategy – Implementation – Consultation
BAYS	24/09/2013	Papers	Open Space Strategy – Implementation – Feedback
BAYS	24/09/2013	Agenda	Bayside Bicycling Strategy – Draft (extract)
BAYS	29/10/2013	Papers	Ricketts Point and Ricketts Point Landside Management Plan: Strategic review
CASE	17/02/2009	Agenda	Edwin Flack and Lawson Poole Recreation Reserves
CASE	15/09/2009	Agenda	Dog waste collection system trial
CASE	28/01/2010	Agenda	Excess animal permit
CASE	09/02/2010	Agenda	Berwick Obedience Dog Club (from Planning Committee minutes 08/12/2009)
CASE	09/02/2010	Agenda	Presentation to Council from applicant and objectors

Council	Date	Type	Description
CASE	16/02/2010	Agenda	Review of the preferred option for the Cranbourne Regional Park
CASE	02/03/2010	Agenda	Berwick Obedience Dog Club
CASE	02/03/2010	Agenda	Casey Fields Masterplan
CASE	16/03/2010	Agenda	Berwick Obedience Dog Club – as a sporting organisation
CASE	23/03/2010	Agenda	Berwick Obedience Dog Club – ‘Special Sundays’ approvals
CASE	24/08/2010	Agenda	Excess animal permit
CASE	07/09/2010	Papers	Litter management strategy 2010-2014 (extract)
CASE	21/12/2010	Agenda	On dog walking in open space –Metropolitan Melbourne Investigation subm.
CASE	21/12/2010	Agenda	Excess animals – active monitoring by council
CASE	24/05/2011	Agenda	Animal boarding
CASE	28/06/2011	Agenda	Animal keeping in a residential area
CASE	15/11/2011	Agenda	Casey Fields
CASE	20/12/2011	Agenda	Enforcement resources
CASE	06/03/2012	Agenda	Hunt Club Lakes – Off-leash petition response
CASE	17/04/2012	Agenda	Casey Fields
CASE	14/05/2012	Minutes	Rejection of a reduction in increase of registration fees
CASE	07/05/2013	Agenda	Casey Fields
CASE	21/05/2013	Agenda	Domestic animal management plan
CASE	07/11/2013	Agenda	Dogs and hospital admissions
FRAN	24/01/2011	Minutes	Council's policy and planning framework
FRAN	07/03/2011	Papers	Dog owners as safety advocates
FRAN	07/03/2011	Minutes	Dog owners as safety advocates: Langwarrin community plan
FRAN	07/03/2011	Minutes	Emergency management planning and dogs
FRAN	04/04/2011	Minutes	Uncontrolled dogs on beaches
FRAN	04/04/2011	Papers	Foreshore advisory committee: uncontrolled dogs on beaches
FRAN	23/05/2011	Papers	Annual budget and council plan
FRAN	20/06/2011	Minutes	Uncontrolled dogs on beaches
FRAN	20/06/2011	Papers	Costs of doing survey: uncontrolled dogs on beaches
FRAN	04/07/2011	Minutes	Uncontrolled dogs on beaches: open for community consultation
FRAN	01/09/2011	Papers	About the Street Watch team
FRAN	05/09/2011	Minutes	Summer season beach patrols
FRAN	03/10/2011	Papers	Foreshore advisory committee: uncontrolled dogs on beaches
FRAN	03/10/2011	Papers	Peninsula Strikers Soccer Club
FRAN	03/10/2011	Minutes	Council's inability to take action over incessant barking
FRAN	17/10/2011	Minutes	Passive surveillance benefit
FRAN	07/11/2011	Minutes	Community Safety Strategy
FRAN	07/11/2011	Papers	Community Safety Strategy (extract)
FRAN	21/11/2011	Papers	Frankston South Draft Local Plan
FRAN	28/11/2011	Minutes	Uncontrolled dogs on beaches
FRAN	05/12/2011	Minutes	Skye Recreation Reserve
FRAN	05/12/2011	Papers	Skye Recreation Reserve
FRAN	05/12/2011	Minutes	Council's policy and planning framework
FRAN	16/01/2012	Minutes	Street Watch
FRAN	16/01/2012	Papers	Street Watch report
FRAN	06/02/2012	Minutes	Uncontrolled dogs on beaches - outcome
FRAN	05/03/2012	Papers	Skye Recreation Reserve – results of consultation
FRAN	19/03/2012	Papers	Friends of Frankston Reservoir
FRAN	24/04/2012	Minutes	Allied Reserve – Leash free dog area
FRAN	29/05/2012	Papers	Uncontrolled dogs on beaches
FRAN	29/05/2012	Minutes	Prioritisation of enforcement approach by council
FRAN	29/05/2012	Papers	Prioritisation of enforcement approach by council
FRAN	26/06/2012	Minutes	Allied Reserve – Leash free dog area, call for off-leash criteria
FRAN	26/06/2012	Minutes	Karingal Local Area Plan
FRAN	27/08/2012	Papers	Uncontrolled dogs on beaches
FRAN	27/08/2012	Minutes	Karingal Local Area Plan
FRAN	10/09/2012	Papers	Cat curfew and dog attacks on wildlife

Council	Date	Type	Description
FRAN	22/10/2012	Minutes	Annual Report 2011-12
FRAN	04/03/2013	Minutes	Review of off-leash areas and decision criteria
FRAN	15/04/2013	Minutes	Amendment to local law – dog nuisance
FRAN	11/05/2013	Strategy	Community Safety Strategy
FRAN	05/08/2013	Minutes	Review of off-leash areas and decision criteria – Final criteria
FRAN	05/08/2013	Minutes	Domestic Animal Management Plan Report (DAMP) 2012 to 2016
FRAN	19/08/2013	Papers	Jubilee Park Masterplan
FRAN	19/08/2013	Papers	Fencing of playgrounds
FRAN	19/08/2013	Papers	Footpaths and dog litter
FRAN	19/08/2013	Papers	Amendment to local law – dog nuisance
FRAN	07/10/2013	Agenda	Domestic Animal Management Plan - Approval
FRAN	07/10/2013	Minutes	Domestic Animal Management Plan - Approval
FRAN	21/10/2013	Agenda	Community Plan Feedback from consultation
FRAN	21/10/2013	Minutes	Community Plan Feedback from consultation
FRAN	18/11/2013	Papers	Downs Estate site
FRAN	18/11/2013	Papers	Annual Report – overview of actions
FRAN	18/11/2013	Papers	Annual Report – overview of actions
FRAN	16/12/2013	Agenda	Fencing of playgrounds
FRAN	27/04/2014	Policy	Free roam areas
FRAN	29/04/2014	Report	Have your say community research report
FRAN	29/04/2014	Plan	Karingal Local Area Plan
FRAN	29/04/2014	Plan	Community Plan
KING	23/03/2009	Minutes	Community safety strategy
KING	25/05/2009	Minutes	Leisure Strategy
KING	29/06/2009	Minutes	Front fencing of private space
KING	24/08/2009	Minutes	Winter foreshore regulations
KING	28/09/2009	Minutes	Councillor on “dogs on beach” platform
KING	28/09/2009	Minutes	Cat curfew
KING	08/02/2010	Minutes	Anti-social behaviour on the foreshore
KING	22/02/2010	Minutes	Draft playground strategy
KING	27/04/2010	Minutes	Signage of off-leash park
KING	27/04/2010	Minutes	Dog training
KING	24/05/2010	Minutes	Anti-social behaviour
KING	28/06/2010	Minutes	Carrum Roy Dore Reserve Park Refurbishment Plan
KING	26/07/2010	Minutes	Proposal to ban dogs from park
KING	23/08/2010	Minutes	Dog control enforcement order
KING	27/09/2010	Minutes	Open space need for Mentone
KING	25/10/2010	Minutes	Bonbeach tree vandalism (nb: motion lost)
KING	22/11/2010	Minutes	Bradshaw Heathland Park
KING	22/11/2010	Minutes	Control of Dog order
KING	13/12/2010	Minutes	William Fry Reserve
KING	13/12/2010	Minutes	Fencing of Bradshaw Park
KING	13/12/2010	Minutes	Bald Hill Park refurbishment
KING	13/12/2010	Minutes	Enforcement Protocols Policy
KING	28/02/2011	Minutes	Bradshaw Park Fencing – further option
KING	28/03/2011	Minutes	Winter foreshore regulations
KING	28/03/2011	Minutes	Dog control order
KING	23/05/2011	Minutes	Mordialloc Creek Masterplan
KING	22/08/2011	Minutes	Community safety strategy
KING	24/10/2011	Minutes	Domestic Animal Management Plan
KING	19/12/2011	Minutes	Reg Marlow Reserve
KING	23/04/2012	Agenda	Open Space Strategy
KING	23/04/2012	Agenda	Proposed dog off-leash reserve: Reg Marlow Reserve
KING	28/05/2012	Agenda	Open Space Strategy Review
KING	25/06/2012	Agenda	Dog off-leash reserve: Reg Marlow Reserve
KING	25/06/2012	Agenda	Domestic Animal Management Plan - responses from community
KING	25/06/2012	Agenda	Reg Marlow Reserve Feedback

Council	Date	Type	Description
KING	25/06/2012	Agenda	Draft Domestic Animal Management Plan
KING	23/07/2012	Agenda	Domestic Animal Management Plan
KING	27/08/2012	Agenda	Moorabbin Reserve
KING	26/11/2012	Minutes	Conduct of councillors in office
KING	25/02/2013	Agenda	Dog litter bags
KING	22/04/2013	Agenda	Beach enforcement and off-leash areas
KING	27/05/2013	Agenda	Reg Marlow Reserve: relocation of off-leash area
KING	24/06/2013	Agenda	Dales Park Development Plan
KING	24/06/2013	Agenda	Dog off-leash beach support (consultation for the Council Plan)
KING	26/08/2013	Agenda	Coastal Management Plan Review
KING	26/08/2013	Agenda	Reg Marlow Reserve: results of consultation
KING	23/09/2013	Agenda	Community Safety Strategy
KING	28/10/2013	Agenda	Dog litter
KING	25/11/2013	Agenda	Dales Park final report
KING	16/12/2013	Agenda	Coastal Management Plan Review - feedback
KING	16/12/2013	Agenda	Coastal Management Plan
KNOX	24/02/2009	Minutes	Liverpool Road Retarding Basin
KNOX	24/02/2009	Minutes	Knox Pedestrian Plan
KNOX	24/03/2009	Minutes	Liverpool Road Retarding Basin
KNOX	24/03/2009	Minutes	Domestic Animal Management Plan
KNOX	19/05/2009	Minutes	Domestic Animal Management Plan
KNOX	25/08/2009	Minutes	Liverpool Road Retarding Basin
KNOX	08/09/2009	Agenda	Arthur Kleinert Reserve
KNOX	08/09/2009	Minutes	Arthur Kleinert Reserve
KNOX	22/09/2009	Minutes	Registration of dogs
KNOX	13/10/2009	Minutes	Liberty Avenue Reserve
KNOX	13/10/2009	Minutes	Review of local laws
KNOX	27/04/2010	Minutes	Knox Vision 2025
KNOX	22/06/2010	Minutes	Knox Vision 2025
KNOX	24/08/2010	Minutes	Domestic Animal Management Plan
KNOX	14/12/2010	Minutes	Knox Dog Park
KNOX	08/02/2011	Minutes	Bamber Reserve and Lantana Reserve
KNOX	22/02/2011	Minutes	The Haven
KNOX	27/04/2011	Minutes	Rumann Avenue and Benedikt Reserve
KNOX	31/05/2011	Minutes	The Haven
KNOX	06/12/2011	Minutes	Open Space Plan 2012-2022
KNOX	24/04/2012	Minutes	Guy Turner Reserve
KNOX	29/05/2012	Minutes	Open Space Plan 2012-2022
KNOX	12/06/2012	Minutes	Native vegetation policy
KNOX	24/07/2012	Minutes	Knox Dog Park
KNOX	24/07/2012	Papers	Native vegetation policy
KNOX	25/09/2012	Minutes	Knox Dog Park
KNOX	09/04/2013	Minutes	Knox at 50 final report
KNOX	07/05/2013	Minutes	Draft Knox Vision 2025
KNOX	14/05/2013	Plan	Open Space Plan 2012-2022: 1 of 4
KNOX	14/05/2013	Plan	Open Space Plan 2012-2022: 2 of 4
KNOX	14/05/2013	Plan	Open Space Plan 2012-2022: 3 of 4
KNOX	14/05/2013	Plan	Open Space Plan 2012-2022: 4 of 4
KNOX	28/05/2013	Minutes	Domestic Animal Management Plan
KNOX	23/07/2013	Minutes	Domestic Animal Management Plan
PORT	02/02/2009	Agenda	Boating zone changes
PORT	02/02/2009	Papers	Letter from Parks Victoria re: changes to boating zones
PORT	02/03/2009	Minutes	Stance on animal rights in the context of possums
PORT	27/04/2009	Papers	Middle Park beach development
PORT	25/05/2009	Agenda	Port Melbourne light rail reserves – re-sow grass
PORT	01/06/2009	Papers	St Kilda Skate Park location (how council deals with a lack of consensus)
PORT	22/06/2009	Papers	St Kilda Skate Park outcome of workshop

Council	Date	Type	Description
PORT	22/06/2009	Papers	St Kilda Skate Park workshop notes
PORT	22/06/2009	Minutes	St Kilda Skate Park
PORT	13/07/2009	Papers	Catani Gardens study of brushtail possums
PORT	10/08/2009	Papers	Dog off-leash review
PORT	10/08/2009	Papers	Dog off-leash review – initial survey results
PORT	10/08/2009	Minutes	Dog off-leash review – council motion
PORT	14/09/2009	Agenda	Dog off-leash review - Hewison Reserve petition
PORT	14/09/2009	Minutes	Enforcement of dogs
PORT	29/09/2009	Agenda	Dogs on-leash within five metres of shared pathway in off-leash reserve
PORT	29/09/2009	Papers	Open Space Strategy 2009
PORT	29/09/2009	Papers	Open Space Implementation Plan
PORT	26/10/2009	Papers	Dogs off-leash review
PORT	26/10/2009	Papers	Dogs off-leash review - Analysis of Written Submissions
PORT	26/10/2009	Minutes	Dogs off-leash review
PORT	23/11/2009	Minutes	Dogs off-leash review
PORT	23/11/2009	Papers	Dog off-leash review
PORT	07/12/2009	Minutes	Mayoral address
PORT	14/12/2009	Papers	Open Space usage
PORT	12/04/2010	Papers	Footpath trading guidelines – public submissions
PORT	12/04/2010	Papers	Footpath trading guidelines – responses
PORT	24/05/2010	Papers	St Kilda Festival – Feedback
PORT	24/05/2010	Papers	Footpath trading guidelines - feedback
PORT	28/06/2010	Papers	Marina Reserve – off-leash designation
PORT	28/06/2010	Papers	Marina Reserve – council paper
PORT	28/06/2010	Papers	Marina Reserve – feedback
PORT	09/08/2010	Papers	Marina Reserve – Independent reports
PORT	09/08/2010	Papers	Marina Reserve – Dog off-leash area
PORT	09/08/2010	Papers	Marina Reserve – feedback
PORT	09/08/2010	Papers	Marina Reserve – suggestions from children
PORT	11/10/2010	Papers	Marina Reserve – issues raised – discussion
PORT	25/10/2010	Papers	JL Murphy Reserve
PORT	25/10/2010	Papers	JL Murphy Reserve
PORT	25/10/2010	Papers	JL Murphy Reserve – council briefing paper
PORT	25/10/2010	Minutes	JL Murphy Reserve – Hobsons Bay Obedience Dog Club
PORT	28/03/2011	Papers	JL Murphy Reserve – outcome of consultation
PORT	28/03/2011	Minutes	JL Murphy Reserve – relocation of Hobsons Bay Obedience Dog Club
PORT	27/06/2011	Papers	Dog club supported financially by council grant
PORT	11/07/2011	Agenda	Seized dog petition
PORT	11/07/2011	Minutes	Seized dog petition – discussion
PORT	08/08/2011	Minutes	Wall 280 café – footpath trading
PORT	22/08/2011	Papers	Play spaces strategy - consultation
PORT	22/08/2011	Papers	Play Spaces Strategy
PORT	22/08/2011	Papers	Bike Plan
PORT	22/08/2011	Papers	Sustainable transport strategy
PORT	28/11/2011	Papers	Marina Reserve - consultation
PORT	12/12/2011	Papers	Foreshore management plan
PORT	12/12/2011	Minutes	Hobsons Bay Obedience Dog Club
PORT	14/02/2012	Minutes	JL Murphy Reserve
PORT	27/03/2012	Papers	Port Melbourne waterfront urban design framework - submission
PORT	12/06/2012	Agenda	Dog beaches
PORT	12/06/2012	Minutes	Dog beaches
PORT	12/06/2012	Papers	Domestic Animal Management Plan – council paper
PORT	10/07/2012	Minutes	Dog behaviours
PORT	14/08/2012	Papers	Domestic Animal Management Plan – public submissions
PORT	14/08/2012	Papers	Domestic Animal Management Plan – Analysis of submissions
PORT	14/08/2012	Minutes	Community feedback on behaviour of owners
PORT	11/09/2012	Papers	Domestic Animal Management Plan – Quantitative feedback

Council	Date	Type	Description
PORT	11/09/2012	Papers	Domestic Animal Management Plan – council response to feedback
PORT	11/09/2012	Papers	Domestic Animal Management Plan – council paper
PORT	11/09/2012	Minutes	Domestic Animal Management Plan – council resolution
PORT	27/11/2012	Papers	Dog beach
PORT	09/04/2013	Minutes	Dogs in public
PORT	11/06/2013	Minutes	Dogs in public
PORT	25/06/2013	Papers	Community group support for animals
PORT	09/07/2013	Minutes	Dogs in public
PORT	23/07/2013	Agenda	Opposition to fencing off-leash park
PORT	23/07/2013	Minutes	Opposition to fencing of off-leash park
PORT	24/09/2013	Papers	Municipal Health and Wellbeing Plan
PORT	10/12/2013	Papers	Dog beach – Middle Park
PORT	10/12/2013	Minutes	Dog beach – Middle Park – council resolution
PORT	10/12/2013	Papers	Dog beach – Middle Park - consultation
PORT	25/03/2014	Papers	Dogs off-leash – Eastern Reserve
PORT	25/03/2014	Papers	Dog off-leash – Eastern Reserve – Consultation
PORT	25/03/2014	Minutes	Dog off-leash – Eastern Reserve – council resolution
PORT	25/03/2014	Papers	Dog off-leash – Eastern Reserve – consultation
STON	04/05/2009	Minutes	Williams Road pedestrian and dog crossing
STON	22/06/2009	Agenda	Toorak Park and Victory Square Masterplan
STON	17/08/2009	Minutes	Dog attack allegation
STON	07/12/2009	Minutes	Dog attack allegation and destruction powers
STON	21/12/2009	Minutes	Dog attack allegation and destruction powers
STON	24/05/2010	Minutes	Central Park fenced off-leash area
STON	24/05/2010	Agenda	Domestic Animal Management Plan
STON	19/07/2010	Agenda	Como Park North and Thomas Oval Masterplan
STON	04/10/2010	Papers	Victory Square off-leash area
STON	03/11/2010	Strategy	Public Realm Strategy
STON	03/11/2010	Strategy	Public Realm Strategy
STON	22/11/2010	Agenda	Support for end of 28 day holding period
STON	06/12/2010	Agenda	Changes to the Domestic Animals Act 1994
STON	07/02/2011	Agenda	Bailey Avenue Park Masterplan
STON	21/03/2011	Agenda	Surrey Road Park Masterplan
STON	21/03/2011	Papers	Surrey Road Park Masterplan – Public Consultation
STON	04/04/2011	Agenda	Walking Policy
STON	14/06/2011	Agenda	Surrey Road Park Masterplan
STON	18/07/2011	Minutes	Domestic Animal Management Plan – Annual Review
STON	01/08/2011	Agenda	Stonnington Pound Redevelopment
STON	19/09/2011	Minutes	Chris Gahan Reserve – Off-leash trial
STON	03/10/2011	Agenda	Management of dogs and cats in shelters – change in code
STON	19/12/2011	Agenda	Chris Gahan Reserve – Off-leash trial
STON	02/04/2012	Minutes	Central Park off-leash query
STON	23/04/2012	Agenda	The case against compulsory desexing (of cats)
STON	27/08/2012	Minutes	Request for enforcement
STON	24/09/2012	Agenda	Windsor Siding Dog Park
STON	22/10/2012	Minutes	Request for enforcement
STON	03/12/2012	Minutes	Dog Party
STON	17/12/2012	Minutes	Save-a-dog scheme
STON	18/03/2013	Agenda	Windsor Siding Dog Park
STON	18/03/2013	Papers	Windsor Siding Dog Park – Public Consultation
STON	08/04/2013	Minutes	Pets in the Park – thank you to council
STON	08/04/2013	Papers	Como Park – enforcement of illegal activity at park
STON	24/06/2013	Agenda	Winifred Crescent Reserve
STON	01/07/2013	Agenda	Domestic Animal Management Plan – Revision
STON	19/08/2013	Agenda	Stonnington Survey Group
STON	19/08/2013	Papers	Stonnington Survey Group
STON	16/09/2013	Agenda	Chris Gahan Reserve

Council	Date	Type	Description
STON	16/09/2013	Papers	Chris Gahan Reserve – Public Consultation
STON	18/11/2013	Minutes	Sheridan Pavilion and Basil Oval
STON	02/12/2013	Agenda	Revised section 26 order
STON	02/12/2013	Papers	Revised section 26 order
STON	16/12/2013	Agenda	Windsor Siding Dog Park
WYND	06/04/2009	Minutes	Pet expo and microchipping
WYND	27/04/2009	Minutes	Sports Facilities Capital Works Contributions Policy
WYND	27/05/2009	Minutes	Capital works budgeting - Dog Obedience Club – extension to pavilion
WYND	27/05/2009	Minutes	Mayoral Youth Awards
WYND	17/08/2009	Minutes	Synthetic turf – Memorandum of Understanding with the AFL
WYND	16/11/2009	Minutes	Annual Report
WYND	30/11/2009	Minutes	Footpath trading policy
WYND	14/12/2009	Minutes	Mossfiel Reserve Masterplan
WYND	14/12/2009	Minutes	Open Space Maintenance – improving service levels and presentation
WYND	25/01/2010	Minutes	Local law 16 – menacing dogs
WYND	25/01/2010	Minutes	Local law development process
WYND	09/03/2010	Minutes	Galvin Park Masterplan
WYND	12/04/2010	Agenda	Point Cook Reserve Masterplan
WYND	27/04/2010	Agenda	Local Law 16 review
WYND	13/09/2010	Agenda	Dog walking program
WYND	11/10/2010	Agenda	Sun Moth Conservation Reserve
WYND	11/10/2010	Agenda	State Government Levy
WYND	25/10/2010	Agenda	Domestic Animal Management Plan
WYND	25/10/2010	Papers	Domestic Animal Management Plan
WYND	15/11/2010	Agenda	Ardnell Park Redevelopment
WYND	28/02/2011	Agenda	Domestic Animal Management Plan
WYND	28/03/2011	Agenda	Tarneit Gardens Reserve Masterplan (Goddard Street Reserve)
WYND	28/03/2011	Agenda	Haines Drive Reserve Masterplan
WYND	28/03/2011	Agenda	Ageing Well Strategy
WYND	23/05/2011	Agenda	Goddard Street Reserve Masterplan
WYND	23/05/2011	Agenda	Haines Street Reserve Masterplan
WYND	25/07/2011	Agenda	Inquiry into Environmental Design and Public Health in Victoria
WYND	25/07/2011	Agenda	Bicycle Network Strategy
WYND	22/08/2011	Agenda	Logical inclusions in Point Cook South
WYND	26/09/2011	Minutes	Hogans Road Reserve Masterplan
WYND	24/10/2011	Minutes	Point Cook growth and resourcing (question from resident)
WYND	21/11/2011	Minutes	Hogans Road Reserve Masterplan
WYND	19/12/2011	Minutes	Dog “off-lead” areas
WYND	19/12/2011	Minutes	Review Report – Dog off-lead areas
WYND	26/03/2012	Minutes	Bethany Primary School Travel Plan
WYND	26/03/2012	Minutes	Councillor visit to obedience club
WYND	26/03/2012	Minutes	Dumping of rubbish
WYND	26/03/2012	Minutes	City plan review
WYND	23/04/2012	Minutes	Trial dog off-leash area – question
WYND	28/05/2012	Minutes	Dog off-led order
WYND	28/05/2012	Minutes	Dog off-leash area – question from resident
WYND	02/07/2012	Minutes	Dog park construction in budget
WYND	23/07/2012	Minutes	Responsible dog ownership
WYND	27/08/2012	Minutes	Planning and dogs
WYND	22/04/2013	Minutes	Domestic Animal Management Plan
WYND	27/05/2013	Minutes	Chirnside Park Oval Redevelopment
WYND	24/06/2013	Papers	Strategy for managing growth in Wyndham (extract)
WYND	24/06/2013	Minutes	Domestic Animal Management Plan
WYND	22/07/2013	Papers	Leisure strategy (draft)
WYND	16/12/2013	Minutes	Quarterly service report – legislative services
WYND	24/02/2014	Minutes	Saltwater Reserve
WYND	24/02/2014	Minutes	Quarterly service report – Legislative services

Appendix 4: Details of interviews undertaken by institution

The following table details the 28 interviews undertaken by institution. All interviews were conducted between 25 August and 8 December 2014.

- With the exception of the two interviewees from DEPI, each interviewee has been assigned a unique identification number at random from 1 to 26 which is used to denote their anonymous accounts throughout the thesis.
- The two interviewees from DEPI have been excluded from this process as their accounts are readily identifiable given the thesis context. They are identified as 'DEPI'.
- Each interviewee's identification number is preceded by a profession designation of 'AMO', 'OSP' and 'UP' for animal management officer, open space planner and urban planner respectively. This is to enable the reader to know what profession the interviewee belongs to.
- Some interviewees' roles do not fit neatly into the profession designations, particularly for some in executive roles that have broad oversight of multiple departments; for these interviewees, their profession designation may change in the thesis depending on the context of their comments, however their unique identification number remains the same (e.g., interviewee designate 1 shares the following identifiers in the thesis: AMO 1, OSP 1, UP 1).

	Interviewees		Animal Management	Open Space Planning	Urban Planning
	#	Hrs			
Bayside	3	2	•	•	•
Casey	4	2	•	•	-
Frankston	3	5	•	•	•
Kingston	4	4	•	•	•
Knox	4	5	•	•	•
Port Phillip	3	5	•	•	•
Stonnington	3	4	•	•	•
Wyndham	1	1	-	•	-
DEPI	2	2	•	-	-
MPA	1	1	-	-	•

Appendix 5: Domestic Animal Management Plans: references

Code	Council	Plan source	Date retrieved*
BANY	Banyule	http://www.banyule.vic.gov.au/Services/Pets-and-Animals/Domestic-Animal-Plan	18/07/2013
BAYS	Bayside	http://www.bayside.vic.gov.au/Domestic_Management_Plan.pdf	18/07/2013
BORO	Boroondara	http://boroondara.vic.gov.au/residents/animals/domestic-animal-management-pla	18/07/2013
BRIM	Brimbank	http://www.brimbank.vic.gov.au/COUNCIL/Council_Policies_Strategies_Plans/Council_Plans/Domestic_Animal_Management_Plan	18/07/2013
CARD	Cardinia	http://www.cardinia.vic.gov.au/Page/Page.aspx?Page_Id=9	18/07/2013
CASE	Casey	http://www.casey.vic.gov.au/council/policies-strategies/d-f/domestic-animal-management-plan-2013-2016	18/07/2013
DARE	Darebin	http://www.darebin.vic.gov.au/Page/Page.aspx?Page_Id=80	21/01/2014
FRAN	Frankston	Personal communication (21 January 2014)	22/01/2014
GLEN	Glen Eira	http://www.gleneira.vic.gov.au/Community/Pets/Domestic_Animal_Management_Plan	18/07/2013
GREA	Greater Dandenong	http://www.greaterdandenong.com/document/25576/domestic-animal-management-plan	18/07/2013
HOBS	Hobsons Bay	http://www.hobsonsbay.vic.gov.au/Council/Local_laws_and_complaints/Animals/Animal_and_pet_permits	21/01/2014
HUME	Hume	http://www.hume.vic.gov.au/Services_For_You/Pets_Animals/Register_Your_Pet/Domestic_Animal_Management_Plan and personal communication (21 January 2014)	18/07/2013
KING	Kingston	http://www.kingston.vic.gov.au/Local-Laws-Waste/Local-Laws/Your-Pet/Domestic-Animal-Management-Plan	18/07/2013
KNOX	Knox	http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=1265	18/07/2013
MANN	Manningham	http://manningham.vic.gov.au/council/policy_and_strategy_documents/dom_animal.html?s=1142531730	18/07/2013
MARI	Maribyrnong	http://www.maribyrnong.vic.gov.au/Page/Page.aspx?Page_Id=3379	21/01/2014
MARO	Maroondah	http://www.maroondah.vic.gov.au/DomesticAnimalPlan.aspx	18/07/2013
MELB	City of Melbourne	http://www.melbourne.vic.gov.au/ForResidents/Pets/Pages/DomesticAnimalManagementPlan.aspx	18/07/2013
MELT	Melton	http://www.melton.vic.gov.au/Regulations/Animals/Domestic_Animal_Management_Plan	21/01/2014
MONA	Monash	http://www.monash.vic.gov.au/publications/animal-management-plan.htm	21/01/2014
MOON	Moonee Valley	http://mvcc.vic.gov.au/about-the-council/plans-and-strategies/domestic-animal-management-plan.aspx	18/07/2013
MORE	Moreland	N/A	N/A
MORN	Mornington Peninsula	Personal communication (21 January 2014)	22/01/2014
NILL	Nillumbik	Personal communication (21 January 2014)	23/01/2014
PORT	Port Phillip	http://portphillip.vic.gov.au/domestic_animal_management_plan.htm	18/07/2013
STON	Stonnington	http://stonnington.vic.gov.au/news-and-information/media-releases/media-releases-2013/new-plan-helps-protect-local-pets/	18/07/2013
WHITE	Whitehorse	Personal communication (21 January 2014)	22/01/2014
WHITT	Whittlesea	http://www.whittlesea.vic.gov.au/your-council/plans-strategies-and-policies/domestic-animal-management-plan	18/07/2013
WYND	Wyndham	http://www.wyndham.vic.gov.au/aboutwyndham/planspolicieslocallaws/locallaws/domesticanimal	18/07/2013
YARRAC	City of Yarra	http://www.yarracity.vic.gov.au/services/Animal-management/domestic-animal-management-plan/ and personal communication (21 January 2014)	25/01/2014
YARRAR	Yarra Ranges	http://www.yarraranges.vic.gov.au/Residents/Animals/Domestic_Animal_Management_Plan_2013_-_2017	21/01/2014

* All DAMPs were initially retrieved in July 2013. Updates were then sought in January 2014 for all councils. All DAMPs that were in-force in January 2014 were included in the study.

Appendix 6: Off-leash parks and reserves: references

Code	Council	Data source/s	Date retrieved
BANY	Banyule	http://www.banyule.vic.gov.au/Services/Pets-and-Animals/Walking-Your-Dog	27/01/2014
BAYS	Bayside	http://www.bayside.vic.gov.au/living_in_bayside/animals_dog_off_leash_areas.htm	27/01/2014
BORO	Boroondara	http://www.boroondara.vic.gov.au/residents/animals/responsible-pet-ownership	27/01/2014
BRIM	Brimbank	http://www.brimbank.vic.gov.au/LEISURE/Parks/Dog_Off_Leash_Areas	27/01/2014
CARD	Cardinia	http://cardinia.vic.gov.au/Page/Page.aspx?Page_Id=1583	27/01/2014
CASE	Casey	http://www.casey.vic.gov.au/health-safety/local-laws/animals/dogs-off-leash	27/01/2014
DARE	Darebin	http://www.darebin.org/Directory/SubCategoryList.aspx?S2Key=91	27/01/2014
FRAN	Frankston	http://www.frankston.vic.gov.au/Our_Community/Animals/Free_Roam_and_Prohibited_Areas	27/01/2014
GLEN	Glen Eira	http://www.gleneira.vic.gov.au/Community/Pets/Off-leash_areas	27/01/2014
GREA	Greater Dandenong	http://www.greaterdandenong.com/document/25806/dog-off-leash-parks	27/01/2014
HOBS	Hobsons Bay	http://www.hobsonsbay.vic.gov.au/Council/Local_laws_and_complaints/Animals/Dog_off-leash_locations	27/01/2014
HUME	Hume	http://www.hume.vic.gov.au/Leisure_Tourism/Parks_Reserves/Off-leash_Parks_and_Reserves_for_Walking_Your_Dog	27/01/2014
KING	Kingston	http://www.kingston.vic.gov.au/Local-Laws-Waste/Local-Laws/Your-Pet/Dog-Ownership/Dog-Off-Leash-Areas	27/01/2014
KNOX	Knox	http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=127	27/01/2014
MANN	Manningham	http://manningham.vic.gov.au/live/pets_and_animals/off_lead_reserves.html?s=1736055450	27/01/2014
MARI	Maribyrnong	http://maribyrnong.vic.gov.au/Page/Page.aspx?Page_Id=188	27/01/2014
MARO	Maroondah	http://www.maroondah.vic.gov.au/DogsCatsPublic.aspx	27/01/2014
MELB	City of Melbourne	http://www.melbourne.vic.gov.au/ForResidents/Pets/Pages/Walkingyourdog.aspx	27/01/2014
MELT	Melton	http://www.melton.vic.gov.au/Regulations/Animals/Dogs	27/01/2014
MONA	Monash	http://monash.vic.gov.au/community/offlead.htm	27/01/2014
MOON	Moonee Valley	http://www.mvcc.vic.gov.au/for-residents/animals/dog-ownership.aspx	27/01/2014
MORE	Moreland	http://www.moreland.vic.gov.au/animals-and-local-laws/off-leash-park-rules.html	27/01/2014
MORN	Mornington Peninsula	http://www.mornpen.vic.gov.au/Services_For_You/Animals_Pets/Leash-Free_Areas	27/01/2014
NILL	Nillumbik	http://www.nillumbik.vic.gov.au/Living_in_Nillumbik/Animals/Where_to_walk_your_dog	27/01/2014
PORT	Port Phillip	http://portphillip.vic.gov.au/dog_parks_reserves.htm	27/01/2014
STON	Stonnington	http://stonnington.vic.gov.au/residents-and-services/pets-and-wildlife/offleash-areas	27/01/2014
WHITE	Whitehorse	http://www.whitehorse.vic.gov.au/Dog-Off-lead-Areas.html	27/01/2014
WHITT	Whittlesea	http://www.whittlesea.vic.gov.au/pets-plants-and-animals/pets-and-animals/off-leash-areas	27/01/2014
WYND	Wyndham	http://www.experiencewyndham.com.au/leisure_recreation/offlead	27/01/2014
YARRAC	City of Yarra	http://www.yarracity.vic.gov.au/services/Animal-management/dog-off-leash-areas/	27/01/2014
YARRAR	Yarra Ranges	http://www.yarraranges.vic.gov.au/Residents/Animals/Exercising_Your_Dog	27/01/2014

Appendix 7: Playgrounds: references

Code	Council	Data source/s	Date retrieved
BANY	Banyule	http://www.banyule.vic.gov.au/Services/Parks-and-Facilities	28/01/2014
BAYS	Bayside	http://www.bayside.vic.gov.au/things_to_see_and_do/local_parks.htm	28/01/2014
BORO	Boroondara	http://www.boroondara.vic.gov.au/our-city/parks-gardens	28/01/2014
BRIM	Brimbank	http://www.brimbank.vic.gov.au/LEISURE/Parks	28/01/2014
CARD	Cardinia	http://www.cardinia.vic.gov.au/Directory/AgencyList.aspx?S3Key=510 http://www.cardinia.vic.gov.au/Directory/SearchResults.aspx?qu=playground&S1Key=3	28/01/2014
CASE	Casey	http://www.casey.vic.gov.au/arts-leisure/parks-facilities	28/01/2014
DARE	Darebin	http://www.darebin.org/Directory/CategoryList.aspx?S1Key=4 http://www.darebin.org/Directory/SubCategoryList.aspx?S2Key=91	28/01/2014
FRAN	Frankston	http://www.frankston.vic.gov.au/Things_To_Do/Parks_and_Reserves	28/01/2014
GLEN	Glen Eira	http://www.gleneira.vic.gov.au/Connect/Parks_and_recreation/Parks	28/01/2014
GREA	Greater Dandenong	http://www.greaterdandenong.com/document/375/parks-and-reserves http://www.greaterdandenong.com/document/376/playgrounds	28/01/2014
HOBS	Hobsons Bay	http://www.hobsonsabay.vic.gov.au/Community/Sport_and_recreation/Playgrounds http://www.hobsonsabay.vic.gov.au/Community/Sport_and_recreation/Parks_and_facilities_directory	28/01/2014
HUME	Hume	http://www.hume.vic.gov.au/Leisure_Tourism/Parks_Reserves/Parks_Reserves_in_Hume	28/01/2014
KING	Kingston	http://www.kingston.vic.gov.au/Places-and-Spaces/Parks-and-Playgrounds http://www.kingston.vic.gov.au/Lists/Facilities	28/01/2014
KNOX	Knox	http://www.knox.vic.gov.au/playgrounds http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=144	28/01/2014
MANN	Manningham	http://manningham.vic.gov.au/play/playgrounds.html?s=1662280770	28/01/2014
MARI	Maribyrnong	http://maribyrnong.vic.gov.au/Page/page.aspx?page_Id=525	28/01/2014
MARO	Maroondah	http://www.maroondah.vic.gov.au/ParksPaths.aspx	28/01/2014
MELB	City of Melbourne	http://www.melbourne.vic.gov.au/ParksandActivities/Parks/Pages/Guidetoparks.aspx	28/01/2014
MELT	Melton	http://www.melton.vic.gov.au/Out_n_About/Community_facilities/Parks_Facilities	28/01/2014
MONA	Monash	http://monash.vic.gov.au/parks/index.htm	28/01/2014
MOON	Moonee Valley	http://www.mvcc.vic.gov.au/experience-moonee-valley/parks-and-playgrounds.aspx	28/01/2014
MORE	Moreland	http://www.moreland.vic.gov.au/parks-pools-sport/parks-and-playgrounds/parks-in-moreland.html http://www.moreland.vic.gov.au/parks-pools-sport/parks-and-playgrounds/playgrounds.html	28/01/2014
MORN	Mornington Peninsula	http://www.mornpen.vic.gov.au/Leisure_Tourism/Facilities_Directory	28/01/2014
NILL	Nillumbik	http://www.nillumbik.vic.gov.au/Things_to_do/Parks_and_Reserves/Parks_and_Reserves_Directory http://www.nillumbik.vic.gov.au/Things_to_do/Parks_and_Reserves/Playgrounds	28/01/2014
PORT	Port Phillip	http://portphillip.vic.gov.au/parks_playgrounds_locations.htm	28/01/2014
STON	Stonnington	http://stonnington.vic.gov.au/explore-stonnington/parks-and-gardens http://stonnington.vic.gov.au/explore-stonnington/parks-and-gardens/facilities-available/	28/01/2014
WHITE	Whitehorse	http://www.whitehorse.vic.gov.au/Parks-Playgrounds.html	28/01/2014
WHITT	Whittlesea	https://directory.whittlesea.vic.gov.au/parks.aspx	28/01/2014
WYND	Wyndham	http://www.experiencewyndham.com.au/leisure_recreation/parks_in_wyndham http://www.wyndham.vic.gov.au/aboutwyndham/pubmedia/community_directory_2013/community_directory_2013	28/01/2014
YARRAC	City of Yarra	http://www.yarracity.vic.gov.au/environment/Parks-and-reserves	28/01/2014
YARRAR	Yarra Ranges	http://www.yarraranges.vic.gov.au/eServices/Search_the_Community_Directory	28/01/2014

Appendix 8: Dog registration fees

Code	Council	Data source/s	Date retrieved
BANY	Banyule	http://www.banyule.vic.gov.au/files/54e78051-ea3d-49b3-bbc8-a2eb00a30a2d/Animal-Registration-form.pdf	13/09/2014
BAYS	Bayside	http://www.bayside.vic.gov.au/living_in_bayside/new_animal_registrations.htm	13/09/2014
BORO	Boroondara	http://boroondara.vic.gov.au/-/media/Files/Residents/Animals/Animal%20registration%20form%202014-2015.pdf	13/09/2014
BRIM	Brimbank	http://www.brimbank.vic.gov.au/REGULATIONS/Pets_and_Animals/Register_Your_Pet	13/09/2014
CARD	Cardinia	http://cardinia.vic.gov.au/Page/Page.aspx?Page_Id=93	13/09/2014
CASE	Casey	http://www.casey.vic.gov.au/health-safety/local-laws/animals/pet-registration	13/09/2014
DARE	Darebin	http://www.darebin.vic.gov.au/Page/Page.aspx?Page_Id=80	13/09/2014
FRAN	Frankston	http://www.frankston.vic.gov.au/Our_Community/Animals/Pet_Registration	13/09/2014
GLEN	Glen Eira	http://www.gleneira.vic.gov.au/files/0d4abe67-7ecc-4d83-be0c-a19c00cfd4b0/Pet_Rego_application_2013-2014-1.pdf	13/09/2014
GREA	Greater Dandenong	http://www.greaterdandenong.com/document/18819/pet-registration	13/09/2014
HOBS	Hobsons Bay	http://www.hobsonsabay.vic.gov.au/Council/Local_laws_complaints/Animals/Cat_and_dog_ownership_and_registration	13/09/2014
HUME	Hume	http://www.hume.vic.gov.au/Services_For_You/Pets_Animals/Register_Your_Pet	13/09/2014
KING	Kingston	http://www.kingston.vic.gov.au/Local-Laws-Waste/Local-Laws/Pets/DogCat-Registration	13/09/2014
KNOX	Knox	http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=126	13/09/2014
MANN	Manningham	http://www.manningham.vic.gov.au/animal-registration	13/09/2014
MARI	Maribyrnong	http://www.maribyrnong.vic.gov.au/Page/Page.aspx?Page_Id=2727	13/09/2014
MARO	Maroondah	http://www.maroondah.vic.gov.au/common/files/LocalLawsRiskWaste/Animal_Registration_application.pdf	13/09/2014
MELB	City of Melbourne	http://www.melbourne.vic.gov.au/ForResidents/Pets/Pages/petregistration.aspx	15/09/2014
MELT	Melton	http://www.melton.vic.gov.au/files/2bc561a3-539f-4f7d-bfbc-a18900fb0af0/Animal_Registration_Application_form.pdf	13/09/2014
MONA	Monash	http://www.monash.vic.gov.au/community/animals.htm#fees	13/09/2014
MOON	Moonee Valley	http://www.mvcc.vic.gov.au/for-residents/animals/pet-registration.aspx	13/09/2014
MORE	Moreland	http://www.moreland.vic.gov.au/animals-and-local-laws/pet-registration-permits-fines/dog-and-cat-registration.html	13/09/2014
MORN	Mornington Peninsula	http://www.mornpen.vic.gov.au/Services_For_You/Animals_Pets/Pet_Registration	13/09/2014
NILL	Nillumbik	http://www.nillumbik.vic.gov.au/Living_in_Nillumbik/Animals/Dog_and_cat_registration	13/09/2014
PORT	Port Phillip	http://portphillip.vic.gov.au/default/AnimalManagementDocuments/2014_2015_Animal_Registration_Form.pdf	13/09/2014
STON	Stonnington	http://stonnington.vic.gov.au/residents-and-services/pets-and-wildlife/pet-registration/	13/09/2014
WHITE	Whitehorse	http://www.whitehorse.vic.gov.au/IgnitionSuite/uploads/docs/Animal%20Registration%20Form%202014-2015.pdf	13/09/2014
WHITT	Whittlesea	https://www.whittlesea.vic.gov.au/pets-plants-and-animals/pets-and-animals/cat-and-dog-registration	13/09/2014
WYND	Wyndham	http://www.wyndham.vic.gov.au/var/files/uploads/pdfs/d69b3d446e9419d7a582eb95d488eebc.pdf	13/09/2014
YARRAC	City of Yarra	http://www.yarracity.vic.gov.au/Services/Animal-management/Registration/#afee	13/09/2014
YARRAR	Yarra Ranges	http://www.yarraranges.vic.gov.au/files/assets/public/webdocuments/planning-building-health/community-compliance/pets-community-compliance/domestic_animal_registration_form_2014-2015.pdf	13/09/2014

Appendix 9: Correlation matrix of dog ownership and animal management attributes

		p	p-val			p	p-val
Population	U18	0.926	0.000	U18	DogsHumans	0.024	0.897
Population	HouseTownhouse	0.889	0.000	U18	DogsHousehold	0.195	0.293
Population	Impound	0.712	0.000	U18	DogsChildren	-0.353	0.051
Population	DogsReg	0.658	0.000	U18	DogsBackyard	-0.203	0.274
Population	Households	0.875	0.000	U18	U18Adults	0.656	0.000
Population	AreaParks	0.342	0.060	U18	Owner	0.547	0.001
Population	Attack	0.414	0.049	U18	Fertility	0.560	0.001
Population	NumDogParks	0.488	0.005	U18	IER	0.302	0.099
Population	Barking	0.550	0.005	U18	Area	0.288	0.117
Population	Playgrounds	0.564	0.001	U18	AreaPkCv	0.102	0.584
Population	Enforcement	0.222	0.237	U18	AuthOfficer	0.246	0.207
Population	DogsHumans	-0.213	0.250	U18	Compliance	0.038	0.841
Population	DogsHousehold	-0.098	0.598	U18	DogsAreaPark	0.158	0.396
Population	DogsChildren	-0.411	0.022	U18	PopDensity	-0.512	0.003
Population	DogsBackyard	-0.402	0.025	U18	DogsAreaAll	-0.434	0.015
Population	U18Adults	0.386	0.032	U18	DogsAreaPkCv	-0.147	0.430
Population	Owner	0.328	0.072	U18	Migration	0.105	0.572
Population	Fertility	0.273	0.137	U18	Income	-0.412	0.021
Population	IER	0.098	0.600	U18	IRSD	-0.314	0.085
Population	Area	0.114	0.542	U18	English	-0.122	0.515
Population	AreaPkCv	0.042	0.822	U18	Education	-0.141	0.457
Population	AuthOfficer	0.157	0.423	HouseTownhouse	Impound	0.748	0.000
Population	Compliance	-0.063	0.740	HouseTownhouse	DogsReg	0.818	0.000
Population	DogsAreaPark	0.082	0.663	HouseTownhouse	Households	0.823	0.000
Population	PopDensity	-0.252	0.171	HouseTownhouse	AreaParks	0.478	0.007
Population	DogsAreaAll	-0.296	0.105	HouseTownhouse	Attack	0.637	0.001
Population	DogsAreaPkCv	-0.064	0.731	HouseTownhouse	NumDogParks	0.459	0.009
Population	Migration	0.297	0.105	HouseTownhouse	Barking	0.581	0.003
Population	Income	-0.396	0.027	HouseTownhouse	Playgrounds	0.468	0.008
Population	IRSD	-0.292	0.111	HouseTownhouse	Enforcement	0.141	0.456
Population	English	-0.229	0.214	HouseTownhouse	DogsHumans	0.105	0.575
Population	Education	-0.067	0.723	HouseTownhouse	DogsHousehold	0.137	0.464
U18	HouseTownhouse	0.877	0.000	HouseTownhouse	DogsChildren	-0.196	0.290
U18	Impound	0.815	0.000	HouseTownhouse	DogsBackyard	-0.283	0.123
U18	DogsReg	0.768	0.000	HouseTownhouse	U18Adults	0.511	0.003
U18	Households	0.694	0.000	HouseTownhouse	Owner	0.550	0.001
U18	AreaParks	0.339	0.062	HouseTownhouse	Fertility	0.504	0.004
U18	Attack	0.395	0.062	HouseTownhouse	IER	0.304	0.097
U18	NumDogParks	0.485	0.006	HouseTownhouse	Area	0.263	0.152
U18	Barking	0.523	0.009	HouseTownhouse	AreaPkCv	0.136	0.465
U18	Playgrounds	0.503	0.004	HouseTownhouse	AuthOfficer	0.173	0.380
U18	Enforcement	0.187	0.322	HouseTownhouse	Compliance	-0.022	0.909

		p	p-val			p	p-val
HouseTownhouse	DogsAreaPark	0.092	0.623	DogsReg	DogsHumans	0.562	0.001
HouseTownhouse	PopDensity	-0.435	0.014	DogsReg	DogsHousehold	0.568	0.001
HouseTownhouse	DogsAreaAll	-0.335	0.065	DogsReg	DogsChildren	0.221	0.233
HouseTownhouse	DogsAreaPkCv	-0.153	0.410	DogsReg	DogsBackyard	0.278	0.131
HouseTownhouse	Migration	0.000	0.999	DogsReg	U18Adults	0.620	0.000
HouseTownhouse	Income	-0.457	0.010	DogsReg	Owner	0.605	0.000
HouseTownhouse	IRSD	-0.225	0.223	DogsReg	Fertility	0.597	0.000
HouseTownhouse	English	-0.038	0.839	DogsReg	IER	0.454	0.010
HouseTownhouse	Education	-0.060	0.754	DogsReg	Area	0.512	0.003
Impound	DogsReg	0.754	0.000	DogsReg	AreaPkCv	0.382	0.034
Impound	Households	0.544	0.002	DogsReg	AuthOfficer	0.440	0.019
Impound	AreaParks	0.245	0.201	DogsReg	Compliance	-0.008	0.966
Impound	Attack	0.491	0.017	DogsReg	DogsAreaPark	0.145	0.436
Impound	NumDogParks	0.285	0.135	DogsReg	PopDensity	-0.598	0.000
Impound	Barking	0.436	0.033	DogsReg	DogsAreaAll	-0.276	0.133
Impound	Playgrounds	0.241	0.208	DogsReg	DogsAreaPkCv	-0.265	0.150
Impound	Enforcement	0.275	0.149	DogsReg	Migration	-0.345	0.057
Impound	DogsHumans	0.219	0.254	DogsReg	Income	-0.338	0.063
Impound	DogsHousehold	0.331	0.080	DogsReg	IRSD	-0.093	0.619
Impound	DogsChildren	-0.128	0.509	DogsReg	English	0.280	0.127
Impound	DogsBackyard	-0.008	0.967	DogsReg	Education	-0.135	0.477
Impound	U18Adults	0.596	0.001	Households	AreaParks	0.444	0.012
Impound	Owner	0.468	0.011	Households	Attack	0.618	0.002
Impound	Fertility	0.566	0.001	Households	NumDogParks	0.401	0.025
Impound	IER	0.177	0.358	Households	Barking	0.603	0.002
Impound	Area	0.426	0.021	Households	Playgrounds	0.405	0.024
Impound	AreaPkCv	0.200	0.298	Households	Enforcement	0.204	0.279
Impound	AuthOfficer	0.340	0.083	Households	DogsHumans	-0.269	0.143
Impound	Compliance	0.152	0.431	Households	DogsHousehold	-0.322	0.077
Impound	DogsAreaPark	0.338	0.073	Households	DogsChildren	-0.288	0.116
Impound	PopDensity	-0.643	0.000	Households	DogsBackyard	-0.460	0.009
Impound	DogsAreaAll	-0.472	0.010	Households	U18Adults	0.059	0.751
Impound	DogsAreaPkCv	-0.266	0.163	Households	Owner	0.048	0.798
Impound	Migration	-0.030	0.878	Households	Fertility	0.024	0.900
Impound	Income	-0.552	0.002	Households	IER	-0.082	0.663
Impound	IRSD	-0.451	0.014	Households	Area	0.052	0.781
Impound	English	-0.072	0.711	Households	AreaPkCv	0.032	0.864
Impound	Education	-0.291	0.125	Households	AuthOfficer	0.029	0.883
DogsReg	Households	0.565	0.001	Households	Compliance	-0.102	0.592
DogsReg	AreaParks	0.576	0.001	Households	DogsAreaPark	-0.048	0.796
DogsReg	Attack	0.590	0.003	Households	PopDensity	-0.019	0.919
DogsReg	NumDogParks	0.469	0.008	Households	DogsAreaAll	-0.161	0.387
DogsReg	Barking	0.540	0.006	Households	DogsAreaPkCv	-0.042	0.824
DogsReg	Playgrounds	0.374	0.038	Households	Migration	0.249	0.177
DogsReg	Enforcement	0.252	0.180	Households	Income	-0.326	0.074

		p	p-val			p	p-val
Households	IRSD	-0.164	0.379	Attack	DogsAreaPark	-0.170	0.438
Households	English	-0.097	0.604	Attack	PopDensity	-0.339	0.114
Households	Education	-0.021	0.911	Attack	DogsAreaAll	-0.298	0.168
AreaParks	Attack	0.563	0.005	Attack	DogsAreaPkCv	-0.281	0.193
AreaParks	NumDogParks	0.357	0.049	Attack	Migration	-0.248	0.255
AreaParks	Barking	0.429	0.036	Attack	Income	-0.514	0.012
AreaParks	Playgrounds	0.189	0.309	Attack	IRSD	-0.314	0.144
AreaParks	Enforcement	0.180	0.340	Attack	English	0.096	0.663
AreaParks	DogsHumans	0.290	0.114	Attack	Education	-0.044	0.843
AreaParks	DogsHousehold	0.212	0.252	NumDogParks	Barking	0.773	0.000
AreaParks	DogsChildren	0.124	0.506	NumDogParks	Playgrounds	0.714	0.000
AreaParks	DogsBackyard	0.101	0.590	NumDogParks	Enforcement	0.375	0.041
AreaParks	U18Adults	0.258	0.161	NumDogParks	DogsHumans	0.062	0.742
AreaParks	Owner	0.326	0.074	NumDogParks	DogsHousehold	0.113	0.545
AreaParks	Fertility	0.256	0.165	NumDogParks	DogsChildren	-0.018	0.925
AreaParks	IER	0.290	0.113	NumDogParks	DogsBackyard	-0.013	0.943
AreaParks	Area	0.280	0.128	NumDogParks	U18Adults	0.246	0.182
AreaParks	AreaPkCv	0.277	0.131	NumDogParks	Owner	0.249	0.177
AreaParks	AuthOfficer	0.237	0.224	NumDogParks	Fertility	0.108	0.564
AreaParks	Compliance	-0.155	0.415	NumDogParks	IER	0.258	0.160
AreaParks	DogsAreaPark	-0.575	0.001	NumDogParks	Area	-0.065	0.727
AreaParks	PopDensity	-0.330	0.070	NumDogParks	AreaPkCv	-0.072	0.701
AreaParks	DogsAreaAll	-0.232	0.210	NumDogParks	AuthOfficer	0.152	0.441
AreaParks	DogsAreaPkCv	-0.539	0.002	NumDogParks	Compliance	-0.344	0.063
AreaParks	Migration	-0.200	0.280	NumDogParks	DogsAreaPark	-0.128	0.493
AreaParks	Income	-0.078	0.675	NumDogParks	PopDensity	-0.110	0.556
AreaParks	IRSD	0.091	0.625	NumDogParks	DogsAreaAll	-0.018	0.924
AreaParks	English	0.267	0.147	NumDogParks	DogsAreaPkCv	-0.136	0.466
AreaParks	Education	0.041	0.831	NumDogParks	Migration	-0.051	0.786
Attack	NumDogParks	0.196	0.370	NumDogParks	Income	-0.008	0.966
Attack	Barking	0.451	0.031	NumDogParks	IRSD	0.117	0.532
Attack	Playgrounds	0.040	0.855	NumDogParks	English	0.154	0.407
Attack	Enforcement	0.148	0.500	NumDogParks	Education	0.106	0.579
Attack	DogsHumans	0.193	0.378	Barking	Playgrounds	0.575	0.003
Attack	DogsHousehold	0.039	0.858	Barking	Enforcement	0.275	0.194
Attack	DogsChildren	0.042	0.849	Barking	DogsHumans	0.002	0.993
Attack	DogsBackyard	-0.172	0.433	Barking	DogsHousehold	-0.030	0.890
Attack	U18Adults	0.155	0.480	Barking	DogsChildren	-0.111	0.606
Attack	Owner	0.188	0.391	Barking	DogsBackyard	-0.174	0.416
Attack	Fertility	0.323	0.133	Barking	U18Adults	0.158	0.461
Attack	IER	-0.006	0.977	Barking	Owner	0.153	0.476
Attack	Area	0.420	0.046	Barking	Fertility	0.206	0.335
Attack	AreaPkCv	0.312	0.147	Barking	IER	0.142	0.509
Attack	AuthOfficer	0.188	0.416	Barking	Area	0.134	0.533
Attack	Compliance	-0.031	0.888	Barking	AreaPkCv	0.083	0.701

		p	p-val			p	p-val
Barking	AuthOfficer	0.097	0.669	Enforcement	DogsAreaPark	-0.072	0.706
Barking	Compliance	-0.213	0.317	Enforcement	PopDensity	0.073	0.700
Barking	DogsAreaPark	-0.032	0.882	Enforcement	DogsAreaAll	0.190	0.314
Barking	PopDensity	-0.123	0.566	Enforcement	DogsAreaPkCv	-0.069	0.716
Barking	DogsAreaAll	-0.140	0.513	Enforcement	Migration	0.185	0.328
Barking	DogsAreaPkCv	-0.117	0.586	Enforcement	Income	-0.228	0.226
Barking	Migration	-0.019	0.930	Enforcement	IRSD	-0.315	0.090
Barking	Income	-0.206	0.334	Enforcement	English	-0.192	0.310
Barking	IRSD	-0.048	0.825	Enforcement	Education	-0.412	0.024
Barking	English	0.143	0.504	DogsHumans	DogsHousehold	0.923	0.000
Barking	Education	0.037	0.864	DogsHumans	DogsChildren	0.759	0.000
Playgrounds	Enforcement	0.332	0.073	DogsHumans	DogsBackyard	0.842	0.000
Playgrounds	DogsHumans	-0.108	0.563	DogsHumans	U18Adults	0.468	0.008
Playgrounds	DogsHousehold	0.013	0.946	DogsHumans	Owner	0.499	0.004
Playgrounds	DogsChildren	-0.186	0.316	DogsHumans	Fertility	0.504	0.004
Playgrounds	DogsBackyard	-0.179	0.336	DogsHumans	IER	0.535	0.002
Playgrounds	U18Adults	0.210	0.256	DogsHumans	Area	0.509	0.003
Playgrounds	Owner	0.288	0.116	DogsHumans	AreaPkCv	0.381	0.034
Playgrounds	Fertility	0.075	0.689	DogsHumans	AuthOfficer	0.367	0.055
Playgrounds	IER	0.165	0.375	DogsHumans	Compliance	0.033	0.862
Playgrounds	Area	-0.238	0.198	DogsHumans	DogsAreaPark	0.153	0.412
Playgrounds	AreaPkCv	-0.156	0.403	DogsHumans	PopDensity	-0.515	0.003
Playgrounds	AuthOfficer	0.217	0.268	DogsHumans	DogsAreaAll	0.009	0.963
Playgrounds	Compliance	-0.370	0.044	DogsHumans	DogsAreaPkCv	-0.231	0.211
Playgrounds	DogsAreaPark	0.030	0.871	DogsHumans	Migration	-0.750	0.000
Playgrounds	PopDensity	-0.083	0.656	DogsHumans	Income	0.023	0.901
Playgrounds	DogsAreaAll	-0.050	0.788	DogsHumans	IRSD	0.173	0.353
Playgrounds	DogsAreaPkCv	-0.141	0.449	DogsHumans	English	0.539	0.002
Playgrounds	Migration	0.186	0.316	DogsHumans	Education	-0.033	0.863
Playgrounds	Income	-0.114	0.541	DogsHousehold	DogsChildren	0.527	0.002
Playgrounds	IRSD	-0.054	0.773	DogsHousehold	DogsBackyard	0.788	0.000
Playgrounds	English	-0.173	0.351	DogsHousehold	U18Adults	0.698	0.000
Playgrounds	Education	0.154	0.417	DogsHousehold	Owner	0.684	0.000
Enforcement	DogsHumans	0.004	0.984	DogsHousehold	Fertility	0.638	0.000
Enforcement	DogsHousehold	-0.053	0.783	DogsHousehold	IER	0.654	0.000
Enforcement	DogsChildren	0.140	0.460	DogsHousehold	Area	0.552	0.001
Enforcement	DogsBackyard	0.066	0.730	DogsHousehold	AreaPkCv	0.383	0.034
Enforcement	U18Adults	-0.174	0.358	DogsHousehold	AuthOfficer	0.474	0.011
Enforcement	Owner	-0.227	0.227	DogsHousehold	Compliance	0.053	0.781
Enforcement	Fertility	-0.030	0.875	DogsHousehold	DogsAreaPark	0.192	0.301
Enforcement	IER	-0.329	0.076	DogsHousehold	PopDensity	-0.684	0.000
Enforcement	Area	-0.137	0.471	DogsHousehold	DogsAreaAll	-0.204	0.271
Enforcement	AreaPkCv	-0.090	0.637	DogsHousehold	DogsAreaPkCv	-0.306	0.094
Enforcement	AuthOfficer	0.292	0.131	DogsHousehold	Migration	-0.672	0.000
Enforcement	Compliance	-0.167	0.379	DogsHousehold	Income	-0.026	0.890

		p	p-val			p	p-val
DogsHousehold	IRSD	0.110	0.557	U18Adults	DogsAreaPark	0.137	0.463
DogsHousehold	English	0.455	0.010	U18Adults	PopDensity	-0.854	0.000
DogsHousehold	Education	-0.019	0.920	U18Adults	DogsAreaAll	-0.634	0.000
DogsChildren	DogsBackyard	0.821	0.000	U18Adults	DogsAreaPkCv	-0.366	0.043
DogsChildren	U18Adults	-0.160	0.389	U18Adults	Migration	-0.344	0.058
DogsChildren	Owner	-0.091	0.627	U18Adults	Income	-0.237	0.199
DogsChildren	Fertility	-0.096	0.608	U18Adults	IRSD	-0.079	0.673
DogsChildren	IER	0.073	0.695	U18Adults	English	0.201	0.279
DogsChildren	Area	0.146	0.433	U18Adults	Education	-0.012	0.952
DogsChildren	AreaPkCv	0.201	0.279	Owner	Fertility	0.799	0.000
DogsChildren	AuthOfficer	0.054	0.785	Owner	IER	0.836	0.000
DogsChildren	Compliance	-0.046	0.810	Owner	Area	0.439	0.014
DogsChildren	DogsAreaPark	0.094	0.615	Owner	AreaPkCv	0.275	0.134
DogsChildren	PopDensity	0.061	0.744	Owner	AuthOfficer	0.336	0.080
DogsChildren	DogsAreaAll	0.549	0.001	Owner	Compliance	0.070	0.714
DogsChildren	DogsAreaPkCv	0.056	0.765	Owner	DogsAreaPark	0.113	0.543
DogsChildren	Migration	-0.497	0.004	Owner	PopDensity	-0.777	0.000
DogsChildren	Income	0.251	0.173	Owner	DogsAreaAll	-0.538	0.002
DogsChildren	IRSD	0.221	0.232	Owner	DogsAreaPkCv	-0.356	0.050
DogsChildren	English	0.360	0.047	Owner	Migration	-0.420	0.019
DogsChildren	Education	-0.037	0.846	Owner	Income	-0.188	0.311
DogsBackyard	U18Adults	0.195	0.294	Owner	IRSD	0.068	0.717
DogsBackyard	Owner	0.123	0.509	Owner	English	0.243	0.188
DogsBackyard	Fertility	0.132	0.479	Owner	Education	0.064	0.737
DogsBackyard	IER	0.287	0.117	Fertility	IER	0.563	0.001
DogsBackyard	Area	0.364	0.044	Fertility	Area	0.472	0.007
DogsBackyard	AreaPkCv	0.309	0.091	Fertility	AreaPkCv	0.191	0.304
DogsBackyard	AuthOfficer	0.332	0.085	Fertility	AuthOfficer	0.379	0.047
DogsBackyard	Compliance	0.000	0.999	Fertility	Compliance	0.198	0.294
DogsBackyard	DogsAreaPark	0.127	0.497	Fertility	DogsAreaPark	0.199	0.284
DogsBackyard	PopDensity	-0.241	0.191	Fertility	PopDensity	-0.782	0.000
DogsBackyard	DogsAreaAll	0.212	0.251	Fertility	DogsAreaAll	-0.518	0.003
DogsBackyard	DogsAreaPkCv	-0.135	0.470	Fertility	DogsAreaPkCv	-0.232	0.209
DogsBackyard	Migration	-0.589	0.000	Fertility	Migration	-0.361	0.046
DogsBackyard	Income	0.263	0.152	Fertility	Income	-0.426	0.017
DogsBackyard	IRSD	0.231	0.211	Fertility	IRSD	-0.242	0.190
DogsBackyard	English	0.481	0.006	Fertility	English	0.142	0.446
DogsBackyard	Education	-0.037	0.846	Fertility	Education	-0.166	0.380
U18Adults	Owner	0.906	0.000	IER	Area	0.341	0.061
U18Adults	Fertility	0.816	0.000	IER	AreaPkCv	0.222	0.229
U18Adults	IER	0.727	0.000	IER	AuthOfficer	0.264	0.175
U18Adults	Area	0.512	0.003	IER	Compliance	0.024	0.898
U18Adults	AreaPkCv	0.245	0.184	IER	DogsAreaPark	0.087	0.642
U18Adults	AuthOfficer	0.347	0.071	IER	PopDensity	-0.504	0.004
U18Adults	Compliance	0.119	0.532	IER	DogsAreaAll	-0.295	0.108

		p	p-val			p	p-val
IER	DogsAreaPkCv	-0.248	0.178	Compliance	IRSD	-0.168	0.374
IER	Migration	-0.627	0.000	Compliance	English	-0.082	0.666
IER	Income	0.327	0.073	Compliance	Education	-0.830	0.000
IER	IRSD	0.563	0.001	DogsAreaPark	PopDensity	-0.054	0.775
IER	English	0.596	0.000	DogsAreaPark	DogsAreaAll	0.119	0.524
IER	Education	0.164	0.388	DogsAreaPark	DogsAreaPkCv	0.472	0.007
Area	AreaPkCv	0.852	0.000	DogsAreaPark	Migration	-0.061	0.743
Area	AuthOfficer	0.262	0.178	DogsAreaPark	Income	-0.106	0.569
Area	Compliance	0.392	0.032	DogsAreaPark	IRSD	-0.096	0.608
Area	DogsAreaPark	0.039	0.836	DogsAreaPark	English	-0.049	0.793
Area	PopDensity	-0.659	0.000	DogsAreaPark	Education	-0.153	0.419
Area	DogsAreaAll	-0.547	0.001	PopDensity	DogsAreaAll	0.792	0.000
Area	DogsAreaPkCv	-0.470	0.008	PopDensity	DogsAreaPkCv	0.608	0.000
Area	Migration	-0.457	0.010	PopDensity	Migration	0.287	0.118
Area	Income	-0.284	0.121	PopDensity	Income	0.485	0.006
Area	IRSD	-0.069	0.714	PopDensity	IRSD	0.276	0.133
Area	English	0.344	0.058	PopDensity	English	-0.138	0.458
Area	Education	-0.285	0.127	PopDensity	Education	0.219	0.245
AreaPkCv	AuthOfficer	0.214	0.274	DogsAreaAll	DogsAreaPkCv	0.647	0.000
AreaPkCv	Compliance	0.256	0.172	DogsAreaAll	Migration	0.030	0.873
AreaPkCv	DogsAreaPark	-0.066	0.724	DogsAreaAll	Income	0.483	0.006
AreaPkCv	PopDensity	-0.355	0.050	DogsAreaAll	IRSD	0.243	0.188
AreaPkCv	DogsAreaAll	-0.294	0.108	DogsAreaAll	English	-0.049	0.794
AreaPkCv	DogsAreaPkCv	-0.350	0.053	DogsAreaAll	Education	0.133	0.482
AreaPkCv	Migration	-0.386	0.032	DogsAreaPkCv	Migration	0.261	0.156
AreaPkCv	Income	-0.136	0.465	DogsAreaPkCv	Income	0.186	0.316
AreaPkCv	IRSD	0.060	0.749	DogsAreaPkCv	IRSD	0.025	0.895
AreaPkCv	English	0.304	0.096	DogsAreaPkCv	English	-0.247	0.180
AreaPkCv	Education	-0.186	0.326	DogsAreaPkCv	Education	0.069	0.717
AuthOfficer	Compliance	-0.405	0.032	Migration	Income	-0.280	0.126
AuthOfficer	DogsAreaPark	0.075	0.706	Migration	IRSD	-0.518	0.003
AuthOfficer	PopDensity	-0.406	0.032	Migration	English	-0.851	0.000
AuthOfficer	DogsAreaAll	-0.294	0.128	Migration	Education	-0.152	0.423
AuthOfficer	DogsAreaPkCv	-0.296	0.126	Income	IRSD	0.828	0.000
AuthOfficer	Migration	-0.308	0.111	Income	English	0.443	0.013
AuthOfficer	Income	-0.300	0.121	Income	Education	0.240	0.202
AuthOfficer	IRSD	-0.025	0.901	IRSD	English	0.760	0.000
AuthOfficer	English	0.309	0.109	IRSD	Education	0.334	0.071
AuthOfficer	Education	0.212	0.280	English	Education	0.184	0.329
Compliance	DogsAreaPark	0.210	0.266	Table 24: Pearson correlations and p-values corresponding to 30 attributes of dog ownership (see Table 11) and three attributes corresponding to measures of animal management (see Chapter 8).			
Compliance	PopDensity	-0.282	0.131				
Compliance	DogsAreaAll	-0.261	0.164				
Compliance	DogsAreaPkCv	-0.032	0.865				
Compliance	Migration	0.051	0.789				
Compliance	Income	-0.120	0.528				

Appendix 10: Inferential statistics in support of commentary in Chapters 8 and 11

A number of statistical tests were undertaken. For the sake of brevity, I have included only those which I draw upon in my commentary in Chapters 8 and 11.

In support of urban fringe commentary in Chapter 8

In Chapter 8, I have made a number of comparisons which examine whether a number of attributes are significantly different in built-up areas compared to the urban fringe. In order to facilitate these comparisons, I define the urban fringe for the purposes of my study (in the context of planning for dogs) to comprise the following nine peri-urban municipalities: Cardinia, Casey, Hume, Melton, Mornington Peninsula, Nillumbik, Whittlesea, Wyndham and Yarra Ranges. This definition of urban fringe is broadly in accord with (but not the same as) that of a ‘growth area’ council rather than a ‘fringe council’ in the context of the *Planning and Environment Act 1987* (Vic.) (sections 201R and 46AA respectively). Importantly, compliance animal management approaches by councils are more abundant on the urban fringe than in more built-up metropolitan areas, perhaps attributed to animal management resources servicing a greater land area.

Compliance animal management approach to Urban fringe				
Fringe	N	Mean	std deviation	std error
N	21	0.4561	0.0930	0.020
Y	9	0.5480	0.0924	0.031
Null hypothesis $H_0: \mu_N = \mu_Y$ Alternative hypothesis $H_1: \mu_N < \mu_Y$ $t = -2.49$ with $p = 0.012$ on 15 degrees of freedom Conclusion: Reject the null hypothesis				
Land area to Urban fringe				
Fringe	N	Mean	std deviation	std error
N	22	66.9	36.5	7.8
Y	9	702	471	157
Null hypothesis $H_0: \mu_N = \mu_Y$ Alternative hypothesis $H_1: \mu_N < \mu_Y$ $t = -4.05$ with $p = 0.0019$ on 8 degrees of freedom Conclusion: Reject the null hypothesis				
Population density to Urban fringe				
Fringe	N	mean	std deviation	std error
N	22	2227	920	196
Y	9	271	188	63
Null hypothesis $H_0: \mu_N = \mu_Y$ Alternative hypothesis $H_1: \mu_N > \mu_Y$ $t = 9.50$ with $p = 0.0000$ on 24 degrees of freedom Conclusion: Reject the null hypothesis				

In support of affluence commentary in Chapter 8

Socioeconomic disadvantage was broken into two bands in order to examine the relationship between educational approach to animal management and general affluence in the community. A t-test was performed which showed that educational animal management approaches by councils are more prevalent in affluent communities than in less affluent communities.

Educational animal management approach to Socioeconomic disadvantage				
Affluence Band	N	Mean	std deviation	std error
High affluence	16	0.377	0.089	0.022
Low affluence	14	0.289	0.114	0.03
Null hypothesis $H_0: \mu_H = \mu_L$ Alternative hypothesis $H_1: \mu_H > \mu_L$ $t = 2.33$ with $p = 0.014$ on 24 degrees of freedom Conclusion: Reject the null hypothesis				

In support of income and registration fee commentary in Chapter 11

In order to control for outliers, rather than take a Pearson correlation, average community income was broken into two and three bands in order to examine the relationship between registration fees and average community income using difference of means tests. A t-test was performed with two income bands and a confirmatory Analysis of Variance (ANOVA) was performed with three income bands. In both cases, income was shown to affect the amount of registration fees levied by councils.

The post-hoc analysis following the ANOVA test indicates that those councils with income ranked in the upper third have a significantly greater registration fee than those councils with income ranked in the lower third. Those councils with income ranked in the middle third do not demonstrate any significant difference in registration fee to either extreme.

Registration fees to Income				
Income Band	N	Mean	std deviation	std error
High income	16	45.92	9.80	2.4
Low income	15	36.33	7.56	2.0
Null hypothesis $H_0: \mu_H = \mu_L$ Alternative hypothesis $H_1: \mu_H > \mu_L$ $t = 3.06$ with $p = 0.0025$ on 27 degrees of freedom Conclusion: Reject the null hypothesis				

Registration fees to Income					
Income Band	N	Mean	std deviation		
High income	11	47.51	11.12		
Middle income	10	40.70	7.20		
Low income	10	35.00	6.85		
Source	DF	SSq	MSSq	F	P
Income Band	2	825.2	412.6	5.44	0.010
Error	28	2125.6	75.9		
Total	30	2950.8			
Null hypothesis $H_0: \mu_H = \mu_M = \mu_L$					
Alternative hypothesis H_1 : means are not equal					
F = 5.44 with p = 0.010 on 2 and 28 degrees of freedom					
Normality test: Q-Q plot is approximately linear					
Levene's test for homogeneity of variance: test statistic = 0.651 with p = 0.529 (variances are equal)					
Conclusion: Reject the null hypothesis					
Post-hoc analysis: Likely $\mu_H > \mu_L$ (Tukey's pairwise comparison)					

In support of animal management service cost and registration fee commentary in Chapter 11

The cost of providing animal management services per registered animal was derived from data gathered from each council by the State Government of Victoria (2015). This measure is imperfect to compare to the registration fees for dogs for a number of reasons, including:

- it includes allowances for the costs associated with the management of cats as well as dogs;
- it assumes a similar ratio of dogs to cats in each council;
- it assumes that all councils have a similar rate of non-compliance with registration; and
- it assumes that all councils have a similar mix of income from registration fees and infringement revenues.

Consequently, a correlation measure was deemed inappropriate as the cost data for each individual council introduces too much uncertainty. Instead, the costs of each council's animal management services were ranked in order to facilitate difference of means tests. A t-test was performed with two cost bands and a confirmatory Analysis of Variance (ANOVA) was performed with three cost bands. In the t-test, a positive relationship between cost and registration fees was weak, however with three cost bands, any

relationship between cost and the amount of registration fees levied by councils vanishes. I therefore conclude that, in general, registration fees per dog on their own are independent of the overall cost of providing animal management services per registered animal.

Registration fees to Cost of providing animal management services					
Cost Band	N	Mean	std deviation	std error	
High cost	16	44.10	2.90	2.4	
Low cost	15	38.28	6.69	1.7	
Null hypothesis $H_0: \mu_H = \mu_L$					
Alternative hypothesis $H_1: \mu_H > \mu_L$					
t = 1.71 with p = 0.050 on 24 degrees of freedom					
Conclusion: Accept the null hypothesis (weak relationship)					
Registration fees to Cost of providing animal management services					
Cost Band	N	Mean	std deviation		
High cost	11	41.00	11.22		
Middle cost	10	44.52	10.92		
Low cost	10	38.35	6.89		
Source	DF	SSq	MSSq	F	P
Cost Band	2	191.4	95.7	0.97	0.391
Error	28	2759.8	98.5		
Total	30	2950.8			
Null hypothesis $H_0: \mu_H = \mu_M = \mu_L$					
Alternative hypothesis H_1 : means are not equal					
F = 0.97 with p = 0.391 on 2 and 28 degrees of freedom					
Normality test: Q-Q plot is approximately linear					
Levene's test for homogeneity of variance: test statistic = 1.036 with p = 0.368 (variances are equal)					
Conclusion: Accept the null hypothesis					
Post-hoc analysis: Not applicable					

Appendix 11: Methodology for estimating the population of dogs in Melbourne

Household and population yardsticks to estimate the population of dogs

The population of dogs in Melbourne in 2011 is approximately 440,000 (calculated using information sourced from various *Domestic Animal Management Plans*). Not all owners register their dogs with their council which creates problems for councils in providing adequate amenities and services for dogs and their owners, in turn affecting both opportunities afforded to dogs and the welfare of dogs in the community.

Over time, various yardsticks have been proposed to estimate the canine population and councils use a number of these in their attempts to estimate the number of dogs in their municipalities. In a series of surveys from 2004 to 2009, BIS Shrapnel contend that the proportion of Australian households owning dogs has steadily decreased, offset by the growth in the number of households over the same period (Table 25):

Year	Proportion of Australian households with dogs (%)	Number of Australian households with dogs (million)
2004	38.2	2.80
2005	37.8	2.80
2006	37.0	2.81
2007	36.5	2.85
2008	36.0	2.85
2009	35.8	2.88

Table 25: Proportion of households with dogs in Australia (source: ACAC (2010, p.16)).

In their 2009 survey, BIS Shrapnel estimate that the population of dogs is 3.41 million across Australia, equating to 1.18 dogs per household or 16 dogs per 100 people on average (ACAC, 2010, p.7). This is a substantial fall from 2005 results that estimated that each dog-owning household had 1.43 dogs, or 18 dogs per 100 people on average (ACAC, 2006, pp.10-1). There appears to be a trend for more households to own dogs, however more of these households own only one dog.

The 2009 findings of BIS Shrapnel lead to an estimated population of 680,000 dogs in Melbourne in 2011, or around 17 dogs per 100 people. This method does not discriminate between urban and rural settings, nor does to adopt different parameters for flats and apartments (e.g., it is difficult for many flat dwellers to own more than one dog). In this respect, it is a relatively blunt measure that is sensitive to the average number of dogs per household and, by extension, the mixture of dwelling types (Table 26):

Households with dogs	Estimated population of dogs					
	700,000	650,000	600,000	550,000	500,000	440,000
24%	1.80	1.67	1.54	1.41	1.29	1.13
26%	1.66	1.54	1.42	1.31	1.19	1.04
28%	1.54	1.43	1.32	1.21	1.10	
30%	1.44	1.34	1.23	1.13	1.03	
32%	1.35	1.25	1.16	1.06		
34%	1.27	1.18	1.09			
36%	1.20	1.11	1.03			
38%	1.14	1.06				
40%	1.08	1.00				
42%	1.03					

Table 26: The number of dogs per household in Melbourne under different assumptions for the estimated population of dogs and the number of households with dogs (source: author).

The BIS Shrapnel household yardstick is also represented as a population based measure, this approach estimating that there are approximately 16 dogs per 100 people in Victoria (ACAC, 2010, p.10). If applied uniformly to Melbourne, this population yardstick would equate to around 640,000 dogs in 2011. As with the household yardstick, this measure does not consider population density or the type of dwelling as driving dog ownership so it may be inappropriate to apply uniformly to Melbourne and, more so, down to individual councils; however, a measure based on dogs per capita is inherently less sensitive to dwelling type. A number of councils use this method to estimate their dog population.

Census methodologies as an alternative to household and population yardsticks

Not all councils use the BIS Shrapnel yardsticks in estimating their dog populations, some taking a census approach. These studies may paint a more exact picture of dog ownership across Melbourne.

Greater Dandenong conducted a citywide audit and found that 28% of households had a dog, with few households having more than one dog (around 9.4 dogs per 100 people) (City of Greater Dandenong 2013, p.11). In this way, Greater Dandenong customised the BIS Shrapnel yardstick to suit its municipality, in doing so yielding a far smaller estimate of the true dog population (and registration non-compliance). Greater Dandenong attributes this registration non-compliance to a combination of the low socioeconomic status of their municipality and stretched resourcing arising from legislative change (2013, p.13).

Glen Eira attempted to estimate how many dogs it has in its municipality by conducting a doorknock survey to ascertain the level of registration compliance (City of Glen Eira 2013, pp.8-9). Glen Eira is a relatively typical inner city municipality with around 2.49 persons per dwelling and 67% detached or semi-detached housing; both measures however are still below the metropolitan Melbourne average of 2.64 persons and 82% respectively (see Table 11 on page 120). The Glen Eira survey found there to be around 10.7 dogs per 100 residents with a relatively high rate of registration compliance (2013, pp.8-9).

The City of Melbourne attempted a similar compliance survey in the inner city suburb of Kensington, revealing an (expectedly) very low four dogs per 100 residents over the municipality (City of Melbourne 2013, p.13). The City of Melbourne result is unable to be generalised due to the unique nature of the inner city municipality, with under 10% of dwellings detached (cf. metropolitan Melbourne of 82%) and a very low 1.95 average persons per household (cf. 2.64).

Two councils apply a flat multiple to their registered dog population, in doing so using the number of registrations as a yardstick with the multiple representing an assumed degree of compliance in the municipality, this being the mirror problem to directly measuring the true population of dogs. Darebin references a study that estimates the rate of registration compliance (City of Darebin 2013, p.9). This study found that 64% of Victorian dogs are registered, leading to a factor of 1.56 applied to the registration of dogs. Registration compliance in Greater Dandenong was better than this study (around 70% compliant) (based on data from the 2011 Census (see Table 11 on page 120) and City of Greater Dandenong (2013, p.11)). Both Glen Eira and the City of Melbourne were substantially better than Greater Dandenong (88% compliant in both audits) (City of Glen Eira 2013, pp.8-9; City of Melbourne 2013, p.13), leading to a tentative conclusion that the 64% compliance estimate for Darebin is understated. Curiously, Yarra Ranges have applied a flat multiple of 1.4 to the number of registered dogs (equivalent to an assumption of 71% registration compliance) (Yarra Ranges Council 2013, p.24); one possible explanation might be the predominantly rural nature of the municipality and the presence of a substantial number of dogs that never leave their owner's property, presumably leading some owners to conclude that registration was unnecessary.

If the consistent 88% compliance found in the independent audits of Glen Eira and the City of Melbourne councils typically applies across all Melbourne councils on the average, the population of dogs in Melbourne is approximately 500,000 in 2011.

Clearly, there are a variety of methodologies available to estimate the population of dogs. Table 27 lists the estimated dog populations for councils which publish a measure, along with the method that the council used and a translation of that measure into a common ‘dogs per 100 people’ yardstick. Notably, census methods undertaken by a number of councils have yielded much higher rates of registration compliance than implied by the Australian Companion Animal Council measures; whether the higher registration compliance is causally related to the propensity for a council to undertake a census remains unknown.

Council	Method used	Registered dogs (reported)	Estimated dogs (reported)	Dogs per 100 people (reported)
Casey	BIS: Households	29,965	50,339	19.3
Frankston	BIS: Households	21,420	31,500	24.2
Hobsons Bay	BIS: Households	10,882	21,122	23.9
Hume	BIS: Population	18,117	29,250	18.0
Kingston	BIS: Population	19,437	21,709	14.6
Manningham	BIS: Population	12,354	21,354	18.3
Mornington Peninsula	BIS: Population	25,880	27,198	18.0
Glen Eira	Census/Audit	12,530	14,000	10.2
Greater Dandenong	Census/Audit	10,012	12,740	9.0
City of Melbourne	Census/Audit	3,060	3,477	3.7
Darebin	Flat multiple	10,894	17,021	11.9
Yarra Ranges	Flat multiple	25,033	35,046	23.5

Table 27: Council estimates for the number of dogs in their municipality translated into a common ‘dogs per 100 people’ yardstick (source: author and individual council *Domestic Animal Management Plans* (see Appendix 5)).

Appendix 12: Abstracts of publications which arise directly out of this work

Paper 1 (published)

Carter, SB, Day, JE, Fryd, O 2015, 'Don't fence me in: Understanding local government decisions to allocate and fence public open space for dogs in Melbourne, Australia', paper presented to the 7th State of Australian Cities (SOAC) National Conference, Gold Coast, Queensland, Australia, 9-11 December.

This study examines the rationales of key actors in local government in making decisions about fencing public open spaces for dogs and builds an overarching understanding of how different councils allocate public open space for dogs. To create sustainable cities, urban planning as a profession must critically engage with management of other species, not just humans. Around 40% of households in Australia own a dog, yet dogs are a neglected subject in planning scholarship. Dogs have a private and public life, and a key aspect of their public life involves urban parkland. Twenty-eight key actors from eight councils in Melbourne and the Victorian government were interviewed during August-December, 2014. This study adopts a qualitative content analysis of these interview texts to identify the drivers of the decision-making process undertaken by these key actors in local government and examine the outcomes of that process.

Urban parkland is typically scarce in supply and deeply contested. Dogs are a controversial user of urban parkland and with their owners are often relegated to marginal urban spaces. The decision-making process and outcomes of local government, to fence or not to fence, illuminates the treatment of dogs and dog owners in planning and highlights some dilemmas and debates that urban planners face when planning for other species. Importantly, the practice of allocating and fencing open space for dogs is found to primarily focus on the interests of dog owners rather than dogs.

About the conference: The State of Australian Cities (SOAC) National Conference is a biennial conference for urban scholars to present research and discuss topics relevant to urban Australia. All papers admitted to conference proceedings are subject to a double-blind peer review. For a copy of the paper, see the Australian Policy Online repository: <http://apo.org.au/collections/soac-conferences>

Paper 2 (published)

Carter, SB 2016, 'Why planning limits its concern: a case study of planning for dogs in Melbourne, Australia', *Australian Planner*, vol. 53, no. 3, pp.251-9, doi:10.1080/07293682.2016.1210658, <<http://dx.doi.org/10.1080/07293682.2016.1210658>>.

As urban planners focus on creating more sustainable cities, there is an increasing need to plan for other species. Found in around 40% of Australian households, dogs have a growing, legitimate presence in urban culture and society. Dogs however remain a neglected subject of urban planning scholarship and practice. This paper critically examines why urban planners exclude dogs as subjects of their plans through the voices of practising strategic planners in the urban context of Melbourne, Australia. This paper characterises planning as being governed by two dimensions – the ontological and epistemological – and finds that the actions of planners in excluding dogs from consideration concerns the functioning of their ontologies of gatekeeper and practitioner as they negotiate and reshape the frontier of planning and its field of concern. The importance of anthropocentrism in governing how planners exclude dogs from planning in practice is shown to be profound.

Paper 3 (published)

Carter, SB 2016, 'Establishing a framework to understand the regulation and control of dogs in urban environments: a case study of Melbourne, Australia', *SpringerPlus*, vol. 5, no. 1190, pp.1-13, doi:10.1186/s40064-016-2843-8, <<http://dx.doi.org/10.1186/s40064-016-2843-8>>.

Background: This study examines the effectiveness of animal management from a critical theory perspective, establishing a framework to describe the animal management activities of local government. In creating sustainable cities, local government must critically engage with the management of other species which live alongside humans. Despite around 40 % of Australian households owning a dog, there is relatively scarce scholarly attention paid to animal management as a subject in its own right. There are numerous studies examining the need to regulate dogs, however there are relatively few studies which examine the effectiveness of regulation.

Results: This study adopts interpretive qualitative content analyses of documentary and interview accounts to critically describe the practice of animal management and suggest why it takes place the way it does. An ontological-methodological framework is introduced to frame the practice of animal management, relating the methodology of animal management to the underlying ontological orientation of local government. This study highlights some institutional conditions which allow particular animal management activities to flourish. Enforcement of barking dog nuisance and responsible dog ownership education are shown to demonstrate attributes of regulatory success. Conversely, enforcement of effective control and community education processes demonstrate some attributes of regulatory failure.

Conclusions: This study demonstrates how institutional ontology and methodology affect the practice of animal management. This study provides animal management officers and local government with a means to critically examine particular approaches to animal management in practice, offering an opportunity to improve the effectiveness of animal management functions in local government. In contributing to improving the awareness of local government as to how they plan for and manage dogs, this study contributes to a broader community consideration of dogs as a beneficial part of society.

Paper 4 (accepted for publication in *Australian Planner*; to appear in a forthcoming issue)

Carter, SB n.d., *How planning limits its concern: a case study of planning for dogs in Melbourne, Australia*, 13 pp.

As urban planners focus on creating more sustainable cities, there is an increasing need to plan for other species. Found in around 40% of Australian households, dogs have a growing, legitimate presence in urban culture and society. Dogs however remain a neglected subject of urban planning scholarship and practice. This paper critically examines the practice of strategic planning as it applies to dogs in the urban context of Melbourne, Australia. Through a narrative of the institutional voices of practising strategic planners and other institutional discourse of local government, this paper provides a critical examination of how strategic planners shape – and limit – the concern of urban planning. This paper provides a deeply critical glimpse into the *modus operandi* of the strategic planner negotiating controversy on planning's frontier. Institutional ontology is shown to dominate any efforts of strategic planners to effect change to urban planning's field of concern.