17 DISCUSSION & CONCLUSION

17.1 Introduction

The aim of my thesis has been to present a historical study of the dingo in Australian cultural and environmental heritage, and to examine the significance of dingo-human encounters within two entirely different human cultures. I have examined social and cross-cultural representations of the dingo, as presented by authoritative institutions such as museums, zoological gardens and governments, alongside representations in popular media, scientific literature and zoo ephemera.

The research clearly identifies the dingo as a cultural keystone species in Aboriginal culture – this classification, as revealed in Part A of the thesis, is significant. It reveals the importance of the dingo to human society pre-colonization, and the level of influence of the dingo within systems of social and ecological knowledge. This contrasts with the status of the dingo as revealed in Part B of the thesis, where their contest for common resources rapidly placed them in direct conflict with Euro-Australian society, and at odds with the British imperial project, whose primary ambition was to turn Australia into a penal colony and food-bowl for Britain. Part C of the thesis, examines how the plans to eradicate the species became embedded in policy and law – leading to the use of poison and other lethal controls against the dingo becoming mandatory in some regions, by 1852 (Parsonson, 1998, p. 243). The long-term legacy of this systematic approach to the elimination of the country's top-order predator, has been witnessed for over one and a half centuries. Recognition of the dingo in academic literature as an ecological force has lagged somewhat, and the fact

that the demise of the dingo in southern and eastern Australia has played a significant part in shaping ecosystems, and contributed to (and perhaps foreshadowed) the biodiversity crisis and environmental disruption that is currently being addressed.

How two human cultures can have such contradictory and competing views towards the same species is explored in this chapter. The conundrum is examined first through reviewing the findings of each chapter, and analyzing what they contribute towards current understanding of the dingo-human interface. I then looking at the systems in place that have facilitated this cross-cultural conflict, and future challenges that have the potential to transform human-dingo encounters.

17.2 Review

The thesis has been presented in three sections. Part A, the dingo ethnography, examined the place of the dingo in Aboriginal culture and heritage, as represented in museum ethnographic collections, artistic traditions and in historical documentation. These initial chapters establish that the dingo was a cultural keystone species to the Aboriginal people. Through collating items in cultural collections, artistic narratives and historical accounts, three central themes emerge, highlighting the dingo's navigational abilities, water finding skills, and behavior with fire. These areas of dingo-human interaction made an important contribution to Aboriginal life as represented in artistic traditions, rock art paintings, ritual ceremonies, and in the construction of talismans and ornamentation (Chapter 2 and Chapter 3). I use the technique of writing short biographical 'prosopographies' (see pp. 10 - 12) to describe dingo water knowledge (Chapter 4) and fire (Chapter 5) in dingo-human encounters.

I apply the framework constructed by Garibaldi & Turner (2014) to identify the dingo's cultural keystone status (outlined on p. 25). Identifying the multiplicity of uses of the species by the Aboriginal community, and the resulting symbolic and ritual presence of the dingo in human cultural systems, contributes considerably to the field of human–animal studies. The study provides an original body of research examining dingo–human symbiotic relationships, and dingo–human conflicts, and assists significantly in understanding the different levels of inclusion and exclusion of species in different human societies and how these manifest in cultural, social and political systems.

Chapter 6 provided a cross cultural study into the history of human–animal interactions, focusing on traditions of adopting the young of other species into human social and cultural systems, a tradition that often included the breast-feeding of orphaned or abandoned mammalian young. This was not uncommon in most societies pre-industrialization. I use this chapter to find a way to respectfully contextualize the prevalence of breast-feeding of dingo pups in Aboriginal society pre-colonization, a relationship that potentially provided many health and welfare benefits for the women in the community, and provides further evidence of the cultural keystone status of the dingo. This was examined in detail in Chapter 7 in relations to the place of the dingo in the lives of women and children.

Collating the contextual history of dingo–Aboriginal interactions, discloses the importance of dingo independence and agency, and the multiplicity of symbiotic mechanisms at play between Aboriginal people and the dingo. The dingo can be a companion, guardian, food source or navigator. Cautionary tales of the dingo are also told, indicative of their powerful presence in the cosmology of the people, consistent with the findings of historian Merryl Parker, in her study of literary representations of the dingo (2006, p. 188):

Aboriginal representation of the dingo is always grounded in empirical knowledge and myths built on the known characteristics of the dingo: its regular need for water, its communal family structure, its methods of controlling territory and its potential danger to humans. Such knowledge and the resulting ennobling or warning myths are used to *improve* the human condition: colonial and contemporary ideology results in the *degradation* of the dingo and its environment.

This finding is important to emphasize, as it highlights a key difference between Indigenous ecological knowledge systems and western attitudes to wildlife. The Aboriginal system accommodates respect for the animal's agency, and is cautious of the danger they present to human life, but this does no infer that the animal has not right to live.

Chapter 8 looked at the multi-species history of the dingo-Aboriginal environment. It describes the custom of raising dingoes from puppyhood in Aboriginal camps, with the expectation that they would return to the wild when adult to breed at around 1-2 years of age. (Thomson, 1986). This demonstrates that the development of an

unspecified portion of the dingo population intersected with Aboriginal customs, and involved a domestic stage within the life cycle of the species. These customs and traditions of adopting native animals into Aboriginal society were not limited to raising dingoes, as is demonstrated by accounts of many other species co-habiting in the camps. Affiliation with many of these animals lasted for life though they generally retained their independence (Thomson, 1986). This area of raising of native animals has not been the focus of historical research previously. The accounts were gathered from many primary and secondary sources. Often notes on the raising of animals appear as a footnote, photo caption or passing comment by early naturalists and ethnographers.

Again this is an area of cross-cultural study that adds to academic studies by investigating how Australian multi-species encounters were recognized and celebrated within human cultural systems. Study into the formation and implication of current laws, that make it illegal to keep most native wildlife species as companion animals in Australia, would be a beneficial area of future research. Including many native species in the domestic environment could potentially offer ecological and social advantages, and challenges the paradox of the legality of keeping domestic dogs and cats, which are classified as a biosecurity risk if they escape human control (see p. 26). If a pet brolga should decide to leave a domestic arrangement, for example, it would be just a brolga.

In the conclusion to Part A of the thesis, the significance of the interface between nature and culture in Aboriginal society was evidenced through systems of ecological knowledge, and presented a dynamic three-way relationship between people, country and the Dreaming, with the dingo well placed at the heart of each.

Part B of the thesis traces the dingo in colonial history through four chapters. Chapter 9 examines formative accounts of the dingo in western scientific classification, collection and conquest. The British marines adopted a number of dingo pups within weeks of the first fleet's arrival, but they were revealed to be only partially tameable. Several individuals were shipped to the United Kingdom as gifts or curios, but it was not until 1828, with the opening of London Zoological Gardens, that the dingo was registered officially on public display for the British public. In contrast, the French were dedicated to the systematic collection and classification of flora and fauna earlier in Australia's colonial history, and amassed a collection of thousands of specimens, as a result of Baudin's Voyage of Discovery in 1800–1803. This included two live dingoes who were exhibited in Paris at the *Ménagerie du Jardin des Plantes* and eventually registered by the French as the holotype and type specimens of the species, with the mounts and bones remaining in safe storage for over 200 years (where they remain today) at the Paris *Muséum national d'Histoire naturelle*. These specimens remain formally unrecognized by the British. The French scientists also found that it was not possible to train the dingo to any degree; they were unresponsive to physical discipline, retaining an irrepressible prey drive despite their time in captivity.

In Chapter 11, I found it necessary to add context to the spatial and temporal history of the dingo. The study traces their history with human society back to a similar archaeological time to when the ancient Egyptians first began recording traditions in 'the keeping of carnivores'. At around the same time as the first pyramid plans were being drawn, the dingo was voyaging across the ocean with their human companions, heading towards Australian shores.

The chapter further traces the traditions of wild animal collecting and exhibition, in its various forms from the vivarium through to the imperial zoo collections, and to the modern zoos where the dingo was a popular exhibit throughout the western world over the 19th and 20th centuries. This study was based on a literary review of archival and contemporary literature on the history of zoos, with many authors drawing attention to how the activities of animal collecting reflected aspects of the surrounding society – for example, blood sports with animals was a reflection of medieval morality, menageries were considered a working class entertainment and an introduction to the natural sciences, and the establishment of stationary, permanent zoos was closely affiliated with imperial projects, alongside the development of natural history museums. The animals customarily ended up transferred from the zoo to the museum, where in the 'afterlife' their bones and skins were preserved for research and exhibition.

A review of zoo ephemera documents held at the Smithsonian National Museum of Natural Science in Washington DC, provided a record of various representations of the dingo over 150 years, primarily portrayed as a predator of livestock and a suspected interloper in the Australian biota. The Aboriginal–dingo relationship was rarely discussed. The systemic patterns that emerged from the data revealed how the dingo was culturally and physically marginalized as a consequence of colonial discourse. At the same time as being outcast, their 'uncontrollable' tendencies fascinated zoo audiences. Dingoes fitted well into the exotic species display, where the animals were symbolically (and sensationally) represented as 'wild and exotic beasts', of exaggerated ferocity, providing a vision of colonial adventure, heroics and enthusiasm for empire (Henning, 2006, p. 140).

Chapter 12 provides a detailed prosopography of a rare white dingo named *Australia*, a popular exhibit at Perth Zoo, at the time of Federation. The dingo, along with other Australian animals, featured as gifts to royalty at the turn of the last century. White dingoes became a popular exhibit at this time and traded between zoos and other international institutions, at the same time that populations of wild dingoes were being actively exterminated in rural areas. The dingo's biography was pieced together from media records, correspondence with Royal archivists and photographic records, to reveal a detailed history before and after capture, that is unusual when tracing animal prosopographies.

The history of *Australia* reveals deep paradoxes in Euro-Australian culture, and a particular endemic approach to natural resources as being simultaneously emblematic and expendable. I found studying the history of dingo control compelling, and helpful towards unraveling the context to this anomaly. This led to writing the final section, Part C of the thesis, that contains three chapters on the dynamics of Australian pest control, and the forces that that shaped the field of 'invasion biology'. It starts with Chapter 13, an investigation into the institutionalization of poison from 1814–1945. Chapter 14 traces the advent of aerial baiting from 1946 to the present day, and Chapter 15 follows the construction of the dingo barrier fence, a continental-scale environmental barrier 5,516 kilometers long. All projects aimed to eradicate the dingo or to exclude them from the agricultural lands in the south-east of the continent, to protect livestock from predation.

Chapter 13 traces the institutionalization of poison as can be ascertained from records in media and archival sources, and provides an update, utilizing digital technology and web-search engines, to research completed by Eric Rolls in 1969. The chapter commences in 1814 and traces the application of poisoned baits – designed initially to target dingo populations – through the 19th century. These pest control techniques were later adapted to target populations of herbivores competing with livestock for resources, as a result of the successful eradication of the dingo from many areas of grazing lands. This process allowed pastoralism to flourish, as well as populations of the more resilient native herbivores and the introduced rabbit. However, extensive environmental degradation and extinctions occurred, perhaps attributable to the enthusiastic use of poisons over extended periods of time.

Despite increasing sophistication in the design of dispensing machinery for baits, enabling widespread application of poison in the environment (targeting both carnivores and herbivores), rabbits managed to multiply at a rate that they eventually supported a major meat and fur industry, in direct competition with the traditional sheep and cattle markets. In 1929 the rabbit industry was the largest employer of labor in Australia (Eather & Cottle, 2015). This history has rarely been celebrated as a valuable part of Australian heritage, and in partnership with the vilification of the dingo, opens up questions about the motivational forces and economics behind the imperial project. This will be discussed further in this chapter.

Chapter 14 collated documents relating to the history of aerial baiting that commenced after World War II, a pest control technique that was enthusiastically adopted by the Australian State governments, in the absence of substantial evidence as to its safety or efficacy. The target again was initially dingoes, then rabbits. Increasingly this method of control has also been used to protect vulnerable populations of endangered wildlife in national parks and wilderness areas, to the point that more poison is now allocated to aerial baiting in environmental conservation zones than to livestock regions. This is an area of research that requires further investigation. There is no collated data available on the extent of aerial baiting in national parks or on private land, and there is no consistency in regulations between jurisdictions; even within each State there can be a number of different regulations as to the size of bait, dose and distribution permitted.

Chapter 15 traces the history of the dingo barrier fence that circumnavigates southeast Australia. This structure was constructed after Word War II, joining up existing barrier fencing to form a single continuous continental-scale environmental barrier. The fence was built to exclude the dingo from the rangelands and agricultural districts to the south of the fence-line. The barrier stands around 1.8 meters high, despite research showing that this was insufficient height to present an effective barrier against dingoes. The structure appears to be effective as it disrupts the movement of the dingoes' prey, and forms an almost impenetrable baiting zone along the fence-line, 35 kilometers into the inland side of the structure (assisted also by steel jaw traps and bounty schemes). There are increasing wild dog populations inside the fence-line. However, the State governments that fund the maintenance of the structure to \$10 million per year believe that it is essential.

In 1950, the release of the myxomatosis virus decimated the rabbit population, and considerably improved conditions for the sheep industry. Graziers were encouraged to take up small land holdings in the arid zone, south of the dingo barrier fence, and starting up small operations with a farming model that proved unviable by the 1960s. The rabbit industry had crashed by 1953, along with the rabbit populations.

There has never been a proper environmental impact assessment of the DBF, but accounts of the damage sustained by populations of wildlife either side of the fenceline, suggest that it has been serious. The conclusion of the DBF chapter, is pessimistic for existing methods of animal management in the rangelands but not for the wildlife – my results suggest that removal of the barrier is likely in the near future, as part of the 'transition to transformation' movement already underway in the region, with communities having to adapt to changing climate and market forces. The implication is that it will no longer be financially viable to retain the dingo barrier fence, due to livestock producers in the rangelands diversifying into more resilient stock (camels, donkeys, etc.) that do not require protection from dingo predation.

17.3 Dingo Identification

Dingo identification has been a contentious topic and one that has not been covered in the course of my thesis. 'What is a dingo?' How are they identified, and how can the species be protected if it is not possible to establish reliable methods of differentiating between the dingo and the feral dog? Biologists can identify the dingo through a series of specific skull measurements, and genetic scientists have discovered that dingo DNA has features distinct from all other canines. Neither of these identification techniques can be easily applied in the field, and this is problematic for conservationists and ecologists interested in dingo preservation. The cultural history can help to some degree in this area, as the historical records reveal that there is another method that combines the animals behavioral and morphological traits used by Aboriginal trackers. From these records, Aboriginal people could tell a dingo by the imprint of the paw in the sand – if the animal was a pure dingo, the shape of the foot pads reveal none of the tell-tail dropped claws of the domestic dog, and the trackers could also read *how* the animals were moving across the landscape (*The pastoral problem*, 1908 p. 11):

When the [dingo] was walking, it dragged its feet, when it was trotting one foot was out down exactly on the other, and that when it galloped the hind feet came over the front ones.

The suggestion is that Aboriginal trackers have the ability to assess the status of populations, and this knowledge could be of great benefit in the identification of dingoes in 'protected' areas. Collaboration between scientists and Aboriginal communities in this area of ecological research could yeild promising results in future.

17.4 Ecological Studies in the Art Department

There is growing interest in the area of human-animals studies, particularly within the humanities, Helen Tiffin writes (2009, p. 16):

Since the 1990s, ecological issues have engaged a number of humanities scholars who regard them as not marginal but foundational to their disciplines. For researchers in geography, anthropology, philosophy and politics, for instance, animal and environmental considerations are increasingly seen as the necessary *basis* for human studies.

With regard to positive representations of the dingo in academic literature, much of the published research in favor of dingo preservation comes from the arts disciplines (Cahir & Clarke, 2013; Rose, 1992; Rose, 2011; Probyn-Rapsey, 2015). Historically, scientific dingo research has been primarily economically motivated, to ensure that livestock was protected from predation. Hense there is a substantial body of work published on dingo control, physiology, diet, range and breeding patterns.

Arguably, the dialogue between the arts and the sciences is a necessary process towards the cultural change that would be required for the dingo to be allocated a permanent position within the native biota of the continent – and removed from their current invasive species listing (see Table 4, pp. 241-42).



17-1 Silver dingo from "The Australian apex predators" series 2016. Value Aust \$95 Source: Perth Bullion Co. 2016

17.5 The Relevance of a Cultural Study of the Dingo in 2016

There is a growing body of research acknowledging the place of the dingo in Australian heritage and their keystone role in ecosystem function (Cahir & Clarke, 2013; Balme & O'Connor 2016). The dingo illustrated in Figure 17-1 is recognized for the 'cultural services' provided to Australian society, highlighting a certain national pride in the species resilience. The following caption is from the publicity for the Perth Bullion \$95 silver dingo coin, 2016, pictured in Figure 17-1 (*Cook Islands*, 2016):

The Australian Apex Predator series celebrates the powerful skills and unusual anatomical features that enable these animals to stand apart. The precision with which these animals hunt is matched by the detailed illustration in each piece. ...This coin pays tribute to the dingo and its special place in Australian culture. This wild dog is our largest landbased predator and hunts more than 170 species, from insects to large mammals.

This area is an increasing focus for increasingly powerful biodiversity conservation groups, including the United National Environmental Programme (UNEP). Their specialist ecosystem management program places these issues central to policy making (Perrot-Maitre, 2009, p. 8):

> 'Cultural services' is the umbrella term used for the non-material benefits that people obtain from ecosystems, such as spiritual enrichment, intellectual development, reflection, religious experience, and recreation. It comprises knowledge systems, social relations,

aesthetic values and appreciation of nature.

The blueprint of UNEP's ecosystem management portfolio, supports initiatives towards "turning a healthy profit", safeguarding the ecological foundation, supporting the economics of ecosystems and biodiversity, and supporting transitions to a 'green economy'. Systems thinking, is the paradigm, not dissimilar to *Anpernirrentye* ("interconnections between bush foods, people, Country and all things" – see pp. 119–21) and unlikely to support environmental interventions such as the DBF and environmental poisoning, which have been characteristic of past Australian environmental management. UNEP's *Wicked Problems, Dynamic Solutions* (2016) explains:

A systems thinking approach focuses on systems as a whole: how the parts interrelate and how interconnections create emerging patterns. Systems thinking tools allow us to map and explore dynamic complexity. With a better understanding of systems, we can identify leverage points that lead to desired outcomes and avoid unintended consequences. Environmental problems are often described as "wicked problems" to highlight their complexity and the difficulties they entail.

There are reasons why these movements need to be treated with seriousness in economic planning, as Norton & Reid outline in NATURE AND FARMING (2013, p. 243):

there is increasing pressure from affluent markets (e.g. in Europe, North America and Japan) for products to be produced in an environmentally sustainable manner, including animal welfare considerations.

In a report on consumer activism and the Australian sheep industry, Sneddon & Rollin recorded (2010 p. 382):

The emerging social ethic for animal welfare is a powerful force for change that is ignored by agricultural industries at their peril ... [The Australian wool industry] should actively educate farmers and other industry stakeholders in the changing social ethic and market opportunities for ethically produced wool.

Adaptive management and marketing in response to community environmental and ethical concerns can advantage producers prepared to change, such as the demand for meat from "predator friendly" producers in the USA – a movement that would be well

received by advocates for the dingo and ecological restoration in Australia. These business models advertise their farming processes as part of their marketing appeal, such as using guardian animals and other culture-based (non-lethal) programs to resolve the wildlife–livestock conflict (van Bommel, 2010). This market trend towards ethically produced produce can be seen as timely and advantageous for the rangelands economy at a time when communities in inland Australia are facing their own 'transition to transformation' in the face of climate change (see p. 249). It provides them with a ready and willing market to operate within. It would take some cultural shift for 'dingo friendly' produce to find a market in Australia, making research into the cultural history of the dingo that I have presented timely. This history is valuable towards increasing community interest in the preservation of Australia's living heritage, and increasing economic value attached to industries concerned with preservation of the dingo and native ecology.

17.6 Systems Management

The further suggestion from the studies, is that the suppression of the dingoes with continental-scale vermin-proof fencing and poisons across a third of Australia, has caused its own costly environmental and economic problems. This includes the explosion of prey species including rabbits and meso-predators (foxes, cats), and resulting impacts on wildlife and biodiversity.

Human-dingo relations and land management policies in Euro-Australian society have been colored by an imported western world-view and traditions, despite the known damage of these customs and industries to the Australian environment and biota. For a long period of Euro-Australian history in most quarters, dingoes were and are perceived as a public enemy. However, while it is true that dingoes can kill livestock, scientific evidence does not generally support the claim that the level of damage they inflict is significant (Eldridge et. al.. 2002). The positive influence of the dingo on the native environment is supported by the work of ecologists (see Glen et. al., 2007; Letnic et. al., 2009) but contested by environmental managers and invasion biologists.

The role of the dingo as a trophic regulator is widely accepted by ecologists (Johnson et. al., 2007; Glen et. al., 2007), though the *value* of their ecological role is contested (Allen & Leung, 2014). Glen et al., 2007 wrote:

In Australia, emerging evidence points increasingly towards the dingo

(*Canis lupus dingo*) as a strongly interactive species that has profound effects on ecosystem function.

Allen et al. (2013) were critical of this review, writing:

Not all the claims made about the ecological roles of top-predators can be substantiated by current evidence ... we strongly caution against the positive management of dingoes in the absence of a supporting evidencebase for such action.

The work of Allen et. al., 2011 and Fleming, et. al., 2012, also raise concerns about the level of hybridization and behavioural change in dingo populations. They argue that dingoes could negatively impact native biota if re-introduced to areas where they have been eradicated or subject to lengthy periods of lethal control and that the rural community would not amenable to reintroductions.

"For most rural landholders", announced Pip Courtney on the Australian Broadcasting Commission's rural news program, "the only good dingo is a dead dingo ..." (Schwartz [a], 2016), confirming Allen and Flemings observations. The vilification of the dingo relies on continuation of the narrative that was evident in the zoo ephemera in Chapter 11.13. However, there are indicators that the *economic drivers* that have reinforced this popular view are undergoing significant changes. In part, this is due to the power of social media, internet and a public awareness of animal welfare issues that in the past have been shielded from the public gaze.

A current example is the public response to a goat eradication program on Pelorus Island in Queensland in June 2016, involving the release of four dingoes implanted with 1080 poison capsules, which were timed to activate and kill the dingoes after two years (Schwartz 2016[a]). A petition gathered 170,000 signatures in protest against the treatment of both the dingoes and the goats in the week after the project began. Concern over the safety of endangered birds on the island was also raised. Within two weeks the project's approval was withdrawn (Schwartz 2016[b]). Another example is the threatened closing of the greyhound racing industry in NSW June 2017, an industry said to make a net contribution of \$135 million per annum to the NSW economy (McNally, 2016). Both of these cases have been driven by online activism and set a powerful precedent for animal advocates, as well as entrepreneurial opportunities in the expanding market for ethically produced animal products.

17.7 Dingoes and Sheep

The sheep industry in Australia has not been immune to consumer activism, in addition to recent impacts of adverse climatic conditions, interruptions to feed and water supply, and market downturns. The decline in the national sheep flock from 180 million in 1990 to 70 million today (the lowest level since 1906, Table 1, p. 208) is attributed to multiple causes, but the dingo bears much of the burden of the blame. Allen and West called for 'cooperative and integrated control strategies that actually achieve no gaps in the spatiotemporal coverage of dingo control' (2013, p. 265) – in other words, total eradication from all sheep grazing regions (2013, p. 266):

Dingoes are one of the important causal factors that have had an influence on the historical, contemporary and future distribution of sheep in Australia. The rangeland production of sheep will likely disappear in the next 30-40 years if the present rate of decline continues unabated.

The sheep industry in NSW has been in decline for two and a half decades, with data from 1991 to 2014 revealing that sheep numbers declined by 55% over this time and wool production declined by 63% (Pattinson et. al., 2015). Technological advances in synthetic and other fibres have seen a 50% drop in the demand for wool (ABARES, 2014), and animal welfare concerns have also had a significant impact on the market. An estimated \$100 million per annum was lost from the industry in revenue, following PETA's anti-mulesing campaign in New York in 2004 (Jopson, 2012). The industry has failed to recover since that event, indicating the growing power of animal welfare movements and consumer activism. An informed public is increasingly more inclined to support the protection of biodiversity and animal welfare, than traditional economies, and this trend could have far-reaching implications for sheep graziers in the arid zone in future – particularly as the uncertainties of climate change also impact on the economic viability of their enterprises.

Public surveys highlight a level of ecological illiteracy in the general public around wildlife welfare issues (see Appendix 1) and outlined by Cao in relation to Australian animal law (2010):

There is a misguided public perception that laws already exist that protect wild animal welfare, though this is identified as a gap in the current legal system- along with lack of cohesion across state and territory laws, codes and standards.

As indicated in Chapter 15, the viability of maintaining the DBF will be untenable in the near future, so while it might have been impossible to remove the structure through political agitation, it may be uneconomic to retain. These changes require careful planning but present an opening for new markets and cultures within the rangelands, which could both support and utilize resources including the plants and animals evolved to best thrive under the extreme and highly variable conditions.

17.8 Divergent Cultures

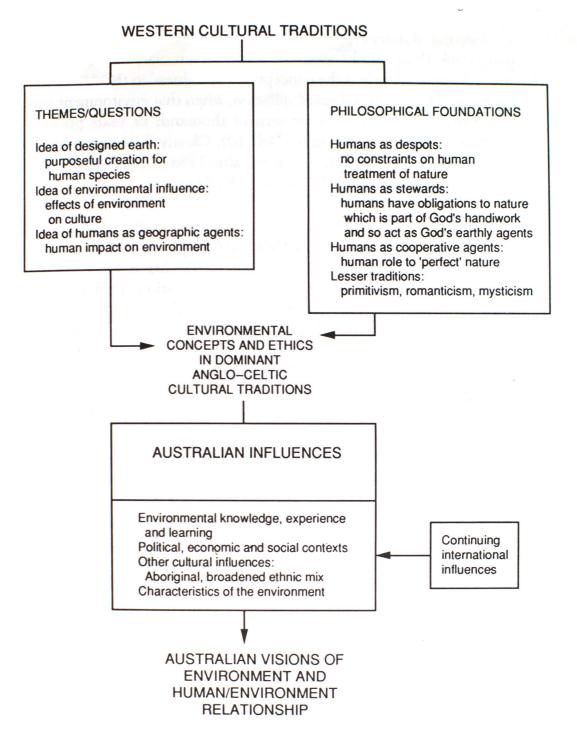


Figure 17-2 Australian visions of environment and Western cultural traditions. Source: Frawley 1994 p. 57

This thesis provides an unfortunate but perfect example of a cross-cultural study of two separate, incompatible cultural systems occupying the same physical landscape, but adopting entirely different conceptual approaches to the natural environment and the species that live there. The status of the dingo in Aboriginal culture, as an important component of their living heritage is reduced to a relic in Euro-Australian cultural systems and a pest species on private land. Penny Olsen writes in her detailed study of pest animals in Australia (1998, p. 20): "In reality, the true status of an animal is often irrelevant – it is how the animal is perceived that determines its pest status." What shapes the marginalization of certain species is a response to what Collins refers to as the overall organization of power in a society, the "matrix of domination" – a concept she uses to explain how social, political and economic systems support and propagate oppression and exploitation (Collins, 1990, pp. 221-38).

The central ideas and concepts shaping western cultural traditions towards the environment are framed by Frawley in Figure 17-2, which seemingly bypass any concept of a personal land ethic, as described in the work of Aldo Leopold and generations of environmentalists after him. Callicot wrote (2004, p. 771):

Leopold came to believe that human harmony with nature could be achieved only if, in addition to governmental management and regulation, private citizens (and property owners in particular) acquired a "land ethic." Such an ethic would make ecosystems and their parts direct beneficiaries of human morality.

What has been revealed through my thesis and tracing the cultural history of the dingo is a narrative history that elucidates this complex interaction between the dingo, the human community and the environment. It is an engaging and captivating story: the museum specimens, illustrations and photographs, are given back some of their history and life-force. The dingo story is a form of pedagogy. It provides instruction on how cultures have different ways of interacting with the natural world, how they value things differently. Dingo history provides a complex view into the workings of Aboriginal and colonial culture, and dingoes remain an irrepressible, living, breathing, graceful and enigmatic treasure of Australian heritage.

17.9 Conclusion

In conclusion, my thesis provides an ethnography of dingo-human encounters, as represented through artworks, ceremonial items, mythology and photographic records. This collection has not been previously compiled, and provides visual and narrative evidence of status of the dingo, as a valued cultural keystone species within Aboriginal society. Themes emerge of dingo knowledge with regard to land, fire and water; these provided the basis for beneficial encounters between dingoes and humans. Traditions of the taming of young dingoes provided advantages for women and children, by increasing mobility, access to food sources, protection, and benefits to health and wellbeing. In return, both wild and tame dingoes commanded a high degree of respect from the Aboriginal community.

The dingo has been a popular item of curiosity, collection and conquest for over 250 years of Euro-Australian history, but their value as a pedagogical tool has been unrecognized, and they have been misrepresented historically within zoological displays and scientific institutions. The dingo–livestock conflict has provided much of the narrative around their exhibition and consequently their public representation. There remains uncertainty in the Euro-Australian community towards the status of the dingo – are they endangered or expendable, lethally dangerous or benign, an environmental asset or economic disaster.

My thesis challenges current dingo management practices and the notion that lethal controls and continental-scale environmental barriers are the only way to manage the dingo. My thesis contributes to the increasing body of literature published in the 21st century, elucidating the positive contribution that the dingo has made to the human community and to the health and resilience of native ecosystems. This development has yet to be realized in policy and legislation that could afford the species protection, and remove them from inclusion on the lists of noxious vermin and alien species. Tracing this area of history has revealed much about the value of interdisciplinary human–animal studies in a time of unprecedented environmental, political and economic change.

Bringing the representations of the dingo together in visual and narrative form is an important and timely contribution towards scholarship involving human–animal studies, cultural studies, ecosystem management and the preservation of biodiversity.