

1 INTRODUCTION

1.1 Thesis Overview

This thesis traces the history of the dingo in Australian historic, Indigenous and natural heritage. The thesis aims to examine the social and cultural representations of the dingo, as presented through authoritative scientific and cultural institutions, and to interrogate how this representation has influenced policy and legislation governing the management of wild dingo populations in Australia over the past 230 years.

Tracing the cultural and ecological history of the dingo is an interdisciplinary inquiry, drawing from human–animal studies, environmental history and ethno-ecology. Human–animal studies are didactic by nature: they have emerged in response to the incongruity of the human–animal interface. The intent is not just to disseminate knowledge, but to encourage review, and facilitate/expatiate change. Human–animal studies is a move away from traditional cultural studies where animals were often the focus as a item of food (or other utility), rather than of cultural or heritage value. Cultural anthropologist Molly Mullin wrote of the changing sociocultural investigations of animals (1999, p. 201):

Humans' relationships with animals, increasingly the subject of controversy, have long been of interest to those whose primary aim has been the better understanding of humans' relationships with other humans.

Mullens describes a sense of urgency to Human–animal studies, and to the moral and

political concerns of the field. Harriet Ritvo described this movement as *The Animal Turn* (2007, p. 119) “providing new understandings of the role of animals in the past and present” (Ritvo, 2007, p. 122):

...the study of animals has become more respectable and more popular in many disciplines of the humanities and social sciences, but it is far from the recognized core of any of them. It remains marginal in most disciplines, and (not the same thing) it is often on the borderline between disciplines. This awkward location or set of locations is, however, the source of much of its appeal and power. Its very marginality allows the study of animals to challenge settled assumptions and relationships – to re-raise the largest issues - both within the community of scholars and in the larger society to which they and their subjects belong.

Into this field, the dingo is a polyfunctional, and polysemic subject; how they have been defined by human society has been largely reliant on context, and they have been increasingly marginalized through social, political and environmental forces, over the past two centuries. The research therefore is essentially a role for the ‘non-specialist’, as described by Dovers (1994, p. 12) in relation to historical studies:

Environmental history is an eclectic enterprise ... Environmental history requires an egalitarian attitude to sources, methods, and inspirations in two ways. The first is simply that any inquiry will typically use multiple sources and methodological approaches, scientific analysis, primary and secondary historical materials, oral sources, personal observations and so on.

Ethno-ecologists, Lestel, Brunois & Gaunet (2006, p. 159), similarly describe these interdisciplinary studies, as requiring:

a pluralist and complementaristic perspective that takes anthropology, philosophy, ethology, linguistics, psychology and evolution theory...rooted in phonology and biosemiotics.

From my background as a scientific photographer and animal scientist, I aim to present for analysis, an historical record of visual and narrative representations of the dingo, as presented by museology, colonial history, the history of science and environmental studies.

This thesis establishes three key areas of inquiry.

Part One explores representations of the dingo in Indigenous culture, as revealed through ethnographic collections, visual art, and historical/anthropological accounts. Themes of dingo knowledge – water, fire and land emerge, along with documentation expounding the symbiotic partnership between dingoes, women and children in traditional Aboriginal society. This has been an area of interest gradually emerging within social and natural sciences – Archeologists Balme and O'Connor (2016, p. 780) found evidence that dingoes have been widely used by women for flushing out and capture of small game, providing what Blame and O'Connor call a new “live hunting technology”. The appearance of the dingo in the archaeological record around 5000 years BP they argue, increased women's contribution to the community's food supply and increased meat consumption. The implication is that "Women's Best Friend" may have been an appropriate term for dingoes (and later for dogs) in that context. My study supports this finding as illustrated through written accounts in 19th and 20th century manuscripts and publications, and looks further into the dingo's contribution to the protection, warmth, sanitation, health and wellbeing of the human community. The dingo–Aboriginal co-existence appears to have been a highly commensal relationship. Dingo–human conflicts emerged with Euro–Australian society, and this change of status is explored in the second section of the thesis.

Part Two first examines scientific representations of the dingo in colonial history and zoological institutions, their history as live exhibits, and in the ‘afterlife’ – the museological term for the systematic process of classification, preservation, and exhibition, transforming animal bodies into scientific specimens. Here the conceptual boundaries between humans and animals, and the nature–culture divide problematic to human–animal studies, emerge alongside the increasing physical and cultural marginalization of the species.

Part Three documents the establishment of dingo eradication programs, and the lasting legacy of these lethal controls on many areas of Australian cultural and environmental heritage. Two hundred and thirty years of dingo-human conflict has had a significant influence on cultural and ecological states and systems. The emerging effects are manifold; the positive effects are evident in the successful (but highly fluctuating) agricultural economy. The negative impacts include loss of the top-order

predator from many areas of the continent, loss of the commensal partnership between the Aboriginal people and the dingo, and the wider effect of environmental damage cause by the controls themselves – the legacy of environmental barriers, poisons, traps, etc., on the health and resilience of the Australian environment. My study reveals that these areas of cultural and ecological impact have been poorly documented and often escaped rigorous examination.

This thesis provided an opportunity to investigate this often heterogeneous and contradictory relationship between human society and animals (Fudge, 2002; Wallach 2011). Attitudes towards the dingo are afforded spatial and temporal context throughout the study; I examine how community views have been constructed over the past 230 years, what influenced society's attitudes, and how dingo representations in popular media and scientific institutions have manifest in legislation, policy and areas of national identity (Breckwoldt, 1988; Parker, 2006).

1.2 Part One

To illustrate the heritage value of the dingo as recognized within Aboriginal culture, Chapters 2 to 9 of the thesis provide a detailed ethnography and cultural history of the dingo. The ethnographic items, of which a representative collection is illustrated in Chapter 2, have often been marginalized in cultural studies and are very rarely seen in public museum displays. The Aboriginal artifacts featured, are held in the stores of Australian and international museums. These items were constructed out of dingo hair, skin and bone. They were used as talismans, for ornamentation, ceremonial and practical applications. They were sourced from locations across the Australian mainland over the 19th and 20th century.

Chapter 3 features examples of Aboriginal artworks based on the dingo narrative – familiar themes start to emerge from the collections, concerning water knowledge, fire and land. These are detailed further in Chapters 4 and 5, through historical narratives constructed from 19th and 20th century archival sources – media, zoo ephemera, scientific manuscripts and journals. I use the technique called a 'prosopography' to examine these dingo-human encounters (see methodology pp. 8 - 12)

Chapter 6 provides a cross-cultural examination of interspecies wet-nursing, which was customary pre-industrialization. I examine this history in detail to give context to

the relationship between Aboriginal women and the dingo in traditional society. This is explored specifically in Chapter 7, with Mornington Island providing a historical case study documenting the rapid change in social and cultural practices that occurred as a result of European impact, eventuating in the complete eradication of the dingo – and dogs – from the island by 1950.

In Chapter 7 the focus moves away again briefly from the dingo, to gain an insight into their multi-species environment and the traditions around the care of many transient companions within Aboriginal society. Many of these species were also adopted into Euro-Australian homesteads early in colonial history. The chapter explores the dynamic systems of reciprocity that existed between humans, animals and the environment – traditions deeply embedded within Aboriginal cosmology. Environmental philosophers, van Dooren, Kirksey & Munster (2016, p. 2), described these relationships central to environmental ethics and Indigenous ecological knowledge (IEK):

All living beings emerge from and make their lives within multispecies communities. As Gregory Bateson put it, the fundamental unit of survival is the “organism-in-its-environment.” Life cannot arise and be sustained in isolation. But relationships also have histories. Beyond a static ecological exchange, like the energy circuits mapped by early ecologists, organisms are situated within deep, entangled histories. And so, beyond mere survival, particular lifeways in all their resplendent diversity emerge from interwoven patterns of living and dying, of being and becoming, in a larger world.

The chapter provides a dialogue between Indigenous traditional practices and western knowledge, and opportunity to look at the wider environment that was formative to dingo–human interactions (Bartlett 2004; p. 2):

Traditional Knowledge emphasizes living relationships of interdependence and interconnectedness, and furthermore always reminds we humans of our responsibilities within these.

The chapter was published as *Walking the Thylacine. Records of Indigenous Companion Animals in Australian Narrative and Photographic History* (Philip & Garden, 2016) in *Society and Animals Journal*, January 2016.

In conclusion to Part A, I explore this dingo knowledge and dingo culture in terms of systems of Indigenous Ecological knowledge, revealing the dingo as a species deeply embedded within Aboriginal systems of tangible and intangible heritage. Smith in Desvallées & Mairesse (2010, p. 41) defined heritage as:

Heritage is a cultural process or performance that is concerned with the types of production and the negotiation of cultural identity, individual and collective memory, and social and cultural values.

Part B examines the dingo in Euro-Australian heritage: the museology of the dingo as represented in natural science collections, their interactions and conflicts with colonial society, and the emergent science of dingo control.

Documentation of the dingo in 18th and 19th century science and colonial history highlights the nature of the colonization process as a part of a worldwide movement. The well documented transformations of the time include the industrial revolution, developments in agricultural technology, mass production of iron, steel, methods of transportation, “the perfection of the railway, and the elaboration of a new array of farming machinery” (Meinig, 1962, p. 4). These transformed production systems and societies worldwide, and impacted directly on the survival of the dingo and dingo heritage.

This time in history is traced in Chapters 10–14 by collating short biographies and records of human–dingo encounters, narratives that emerged from the archives in various forms; as notes of provenance on museum specimens, passing references in the diaries of the early explorers, newspaper reports, zoo ephemera and notes and illustrations made by the natural scientists and ethnographers.

Chapter 10 looks at formative records of the dingo, before and after British arrival in 1788. Chapter 11 examines the history of the dingo in French scientific studies and collections, focusing on the story of the holotype and type specimens collected by Baudin in 1803 and shipped to Paris as live exhibits at the *Jardin des Plantes*. They now reside as mounted specimens in the type stores of the *Muséum national d'histoire naturelle* but remain unrecognized by British taxonomists.

Chapter 12 further examines the history of the dingo as a live exhibit and traces the history of traditions in the ‘keeping of carnivores’, giving temporal context to

Aboriginal–dingo encounters; the dingo emerged in archaeological records around the same time as the first captive hyenas and the cheetahs were recorded in stone by the ancient Egyptians (Hoage & Deiss, 1996).

Chapter 13 is a detailed prosopography of a dingo called *Australia* that was held up as emblematic of Australian wildlife at the time of Australian Federation 1901. Behind the story of *Australia*'s profile as a popular zoo exhibit in Perth, and his image being cast in silver as a gift for the British Royal family, is a disturbing background history – having originally been a target of the government's 'Party of Poisoners', sent out to clear vast areas of rangelands for farming in 1897.

From this narrative, the themes behind the science of dingo control emerge. Part C of the thesis focuses on dingo control, and the legacy of 230 years of application of poison in pest control on the Australian environment. Chapter 14 first traces dingo control in the early years of the 19th century, with the discovery of strychnine poison in 1818 transforming land management in Australia. The chapter details the expansion of dingo control, as revealed through media and government reports, historical records and scientific publications. What emerges from this data is that the systematic approach to pest control using lethal poisons (and wire fencing detailed in Chapter 10) allowed for rapid expansion of agriculture and livestock production, and disruption to the native environment.

Archival studies also reveal that there has been a long tradition in Euro-Australian society, of people speaking out in the defense of the dingo. The recognition of their function in keeping 'natural order' was noted over a century before ecology became a recognized science. In one of many accounts, *The Pastoral Times*, 1863 (*Acclimatisation Society of New South Wales*, p. 5) noted:

Now that the dingo has almost been extinguished on the stations around Deniliquin we begin to discover that although he was a nuisance and that he destroyed numbers of sheep, still he was of some use. Since his disappearance tens-of-thousands of wallabies, paddy-melons, kangaroo-rats and other animals of the bush have shown their faces, and are becoming a nuisance. The dingo was once the terror of these creatures – he used to watch them and by his strategy pounce upon them without mercy as his legitimate prey. The settler will have to take some steps to get rid of them.

Chapter 15 follows on with an examination of the development and broad-scale application of aerial baiting post 1947, again with the dingo as the primary target. This continues as a regulated but standard land management tool in agricultural regions and national parks today.

Chapter 16 explores the continental-scale impacts on the environment, resulting from the construction and maintenance of the 5,516 kilometer Dingo Barrier Fence (DBF). The history of the structure, and future projections are examined. The effect of climate change and changing world markets, alongside a movement towards more ethical and sustainable methods of environmental management, signal a change in direction for the management of dingo populations. The chapter provides a timely review, suggesting that outmoded methods of dingo control may no longer be viable or necessary, in the near future.

Chapter 17 provides the final analysis and conclusion.

The importance of Indigenous ecological knowledge (IEK) and the recognition of the dingo as a cultural keystone species frames much of the first section of the thesis and comes back again in the conclusion – as a reconciliation of disciplines and traditions, the future for the dingo I consider, offers a pathway towards “integrating indigenous ecological knowledge and science in natural resource management” (Walsh, Dobson, & Douglas, 2013)

1.3 Methodology

I have employed grounded theory as the methodology for the thesis, an inductive, qualitative approach in tracing the history of the dingo. This approach is outlined in Bernard (2000, p. 444):

Grounded theory is an iterative process by which you, the analyst, become more and more grounded in the data...The heart of grounded theory is identifying themes in texts and coding the texts for the presence or absence of those themes.

The process was iterative, and involved gathering narratives and visual records from archival sources, original documents, scientific documents, zoo ephemera, etc. These narratives were collated into individual accounts and biographies, or constructed

‘prosopographies’ (see next page). I employed ‘ocuology’ (Bernard, 2000) – a process of sorting through the printed data and visual media, and waiting “for patterns to hit [me] between the eyes”. From this process, themes emerged; patterns, systematic analysis, comparisons, evidence of conflict, cultural contradictions, omissions, inconsistencies, etc. (Bernard, 2000, p. 445). I did not anticipate the themes of dingo water knowledge, or of fire and land – or the story of the dingo called *Australia*; these themes emerged from the data.

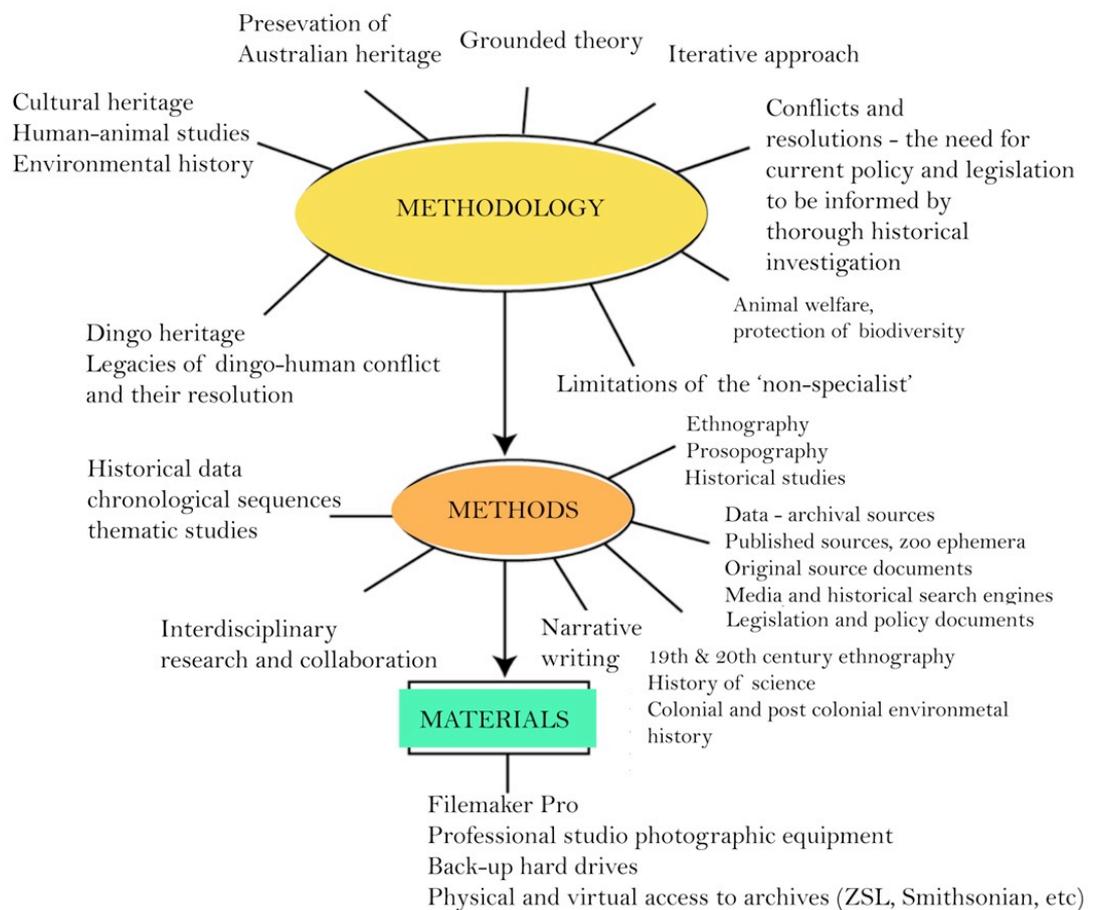


Figure 1-1 Visual map of methodology

The individual unit of analysis has been largely drawn from contextual history, with writing integral to this research process. Through recording the details of the ethnographic collection, prosopographies and contextual history, and interrogating the dingo–human interface, common themes emerge, particularly in areas of dingo–human conflict. The thesis interrogates this history – why did this conflict happen, where did it happen, what was the motivation, who gained, who lost, what did this symbolize, what was the legacy of this action?

The study has aimed through this process to elucidate the functioning of the dingo within traditional culture, and to contrast this by following a chronological reconstruction of events post-colonization. This method of cross-cultural and historical-comparative research is outlined in Kreuger & Neuman (p. 424, 2006):

Historical-comparative research does not try to produce a single, unequivocal set of objective facts. Rather, it is a confrontation of old and new or different worldviews.

Dingo representation is embedded with layers of meaning; their symbolism within Aboriginal culture contains what Garibaldi & Turner (2004) describe as the 'multiplicity of use' defining them clearly as a cultural keystone species.

The research draws from archival records – primary sources, literature and visual records, and popular media. In these historical accounts, the dingo is clearly identifiable, and emblematic (representative, characteristic and illustrative) of Australian wildlife and national identity.

I have employed the technique of constructing prosopographies as an effective method of examining dingo-human encounters in cross-cultural and multi-species contexts. The dingo prosopography provides a collation of archival records, narratives, stories revealing central themes – water, fire and land, and the three-way relationship between human society, the dingo and the land, both in Aboriginal and colonial history.

The prosopography of the dingo is never an entirely complete biography, particularly in that we very rarely know the beginning and the end of the various dingo life stories – they enter the history books through incomplete accounts, appearing momentarily – recorded, measured, photographed, painted, collected, sold, transported, exhibited, or transformed from live exhibits into scientific specimens. The details are sketchy but the stories collectively are descriptive of the 19th and 20th century culture of conquest and collecting of exotic fauna, of human-wildlife conflicts, and of encounters between the dingo and Euro-Australian society. Further, it provides a compelling record tracing the physical and cultural marginalization of the dingo over the past 230 years.

The Oxford definition of prosopography, is a collective biography. The 19th century definition described the prosopography as a “technical rhetorical term indicating the

formal description of the material features of animals and people” (Verboven et. al., 2007, p. 41). Later descriptions removed animals from the subject focus, placing humans alone at the center of biographical records, however my application holds true to the original description, with the animals firmly re-instated at the heart of the study.

The etymology arrives from the Greek word *prosôpon* – to behold, and *‘graphia*’ – description; so it is literally the “description of external/material individual characteristics” (Verboven et al., 2007, p. 41).

The research approach to a prosopography encompasses a simple, systematic organization of relatively rare data in a way that “reveals connections and patterns influencing historical processes” (Verboven et al., 2007, p. 37).

The prosopography provides a record of common characteristics of a group within a particular historical context, a collection of descriptions or ‘incomplete biographies’ that are less interested in individual personality (i.e. exceptional or out of the ordinary characters that are the focus generally of biographies). Instead the prosopography looks at the ordinary, collective ‘normal’. This fits in well with the description of short animal biographies, as the animals themselves are perhaps not so extraordinary or unusual when compared to the rest of their kind, but the circumstances that they find themselves in are.

This has provided a technique to compile the narrative histories including Baudin’s dingoes in Paris in 1803 in Chapter 1, and the story of Australia in Chapter 13

Other prosopographys appear in the thesis under the title of Water, Fire, Land. The usefulness of the dingo in locating water sources had never been clear to me before collating these accounts, and it was not until I came across a number of historical accounts that I understood the significance of what they were saying. History would read quite differently if the dingo’s true value as an ally in the desert environment, had been understood by the colonial explorers.

Another emergent theme was the systematic process of ‘dingo control’ and the effect of this on the native biota after the 1840s. With access to powerful search engines, archival data and newspapers have become increasingly searchable online, and access to historical data is possible with unprecedented range. This was unavailable to

environmental historians such as Eric Rolls (*THEY ALL RAN WILD*, 1969) or A. J. Marshall (*THE GREAT EXTERMINATION*, 1966). They both provided detailed historical records of pest management and its impact. However, the data I have been able to retrieve reveals that the extent of the use of lethal poisons and environmental barriers is even greater than these historians had indicated, and also commenced at a much earlier date than previously documented.

1.4 Methods

The data was gathered from original source documents, archives, popular media and literature, photographs and narrative sources. This has been supported by examination of published scientific reports, monographs and ethnographic material. Individual narrative histories and case studies have been used as the primary unit of analysis.

The thesis covers areas of colonial history, French scientific investigation, ethnology, cultural studies, human–animal studies and pest control.

The research has been conducted mainly through the gathering and collating of data from archival sources. Newspaper databases proved indispensable: “Trove” online database, National Library of Australia (NLA), provided access to many Australian newspapers dating back to the early 1800s. The Illustrated London News available through the NLA website, provided a range of articles and archival photographic material on Aboriginal society, Australian native wildlife, and natural history. The archives of N. W. G. Macintosh at the J. L. Shellshear Museum (University of Sydney) provided a source of unpublished notes, manuscripts, photographs and published newspaper reports from the 1950s to 1970s, including information on government pest control programs over this time, which I had not been able to source online.

A short-term attachment to the Smithsonian Institutional Archives in Washington DC, allowed for access to original documents for dingoes that had travelled to America as part of the first zoological collection to open in the United States. The Smithsonian National Museum allowed access to their extensive zoo ephemera collection, in addition to viewing the dry and wet dingo specimens at the Museum offsite storage facilities, and photographic material in the ethnographic collection. This fellowship

also allowed access to the onsite search engine in the Library of Congress, which is an extraordinary resource of American and foreign newspapers from the 19th and 20th centuries.

I recorded data and specimens from the Natural Science stores of museum collections throughout Europe, using professional photographic equipment for digital capture of record cards, mounted specimens, articulated and unarticulated skeletons, original manuscripts and exhibits.

I had originally planned to include interviews with Aboriginal communities, to include contemporary records of the dingo in Aboriginal culture. However, this was not possible within my project due to a number of reasons. Firstly, much of dingo cultural knowledge is ‘secret knowledge’ and the information is restricted to certain members of the community, so the topic is outside the scope of my academic inquiry. In addition, there is often an understandable reticence on the part of the community to share information of cultural importance with someone from outside the community. In many areas, also, details on the cultural history of the dingo have been lost, along with the loss of language, connection to country, and other important intergenerational knowledge that was not transmitted as a result of the removal of Aboriginal people from their traditional lands and communities.

1.5 Literature Review

Exploring the history and heritage of the dingo has been an interdisciplinary undertaking, drawing on a wide range of literature resources from scientific disciplines to the arts and humanities. The literature review includes contemporary monographs on the dingo, followed by publication on more general areas of research – human–animal studies, environmental history, anthropology and pest control. The research has been informed by individual disciplines of anthropology, archaeology, ecology, history, conservation and natural science. Much of the research data was obtained from archival sources – original documents, media accounts and zoo ephemera and museum collections (physical specimens, records of provenance and visual resources), with the work of scientific historians and human–animal scholars providing the precedent, framework and methodological approaches required to analyze this information.

Monographs published on the dingo cover a wide range of data – ecology, diet, population dynamics, behavior, conflict with livestock, control, identification and ancestry. My thesis looks at the implications of the human–dingo relationship and how methods of control have influenced social and ecological systems, offering an alternative orientation to this body of published work. However, all of the books overlap in many areas of interest and there is a growing body of published research centered on the dingo in historical and contemporary studies.

The monograph *A VERY ELEGANT ANIMAL: THE DINGO*, by wildlife researcher Roland Breckwoldt, was published in 1988, and remains one of the most comprehensive resources on the species. It provided a detailed visual resource with many historical illustrations, images and wildlife photographs. Breckwoldt provides a detailed account of cultural and historical research into the dingo, human–dingo conflicts, methods of control, conservation, identification and ethology. The book took seven years to write, involving travel throughout Australia, in addition to raising a small breeding colony of dingoes in southern New South Wales. Breckwoldt's work provides a starting point from which my own research provides further insight. I expand on Breckwoldt's themes to examine the heritage value of the dingo, through cultural representations, museology and the impact of cultural and physical marginalization of the species on the Australian environment.

THE DINGO IN AUSTRALIA AND ASIA by Laurie Corbett was published in 1995. Corbett was working as a research scientist in wildlife and ecology with the CSIRO. The book details the role of the dingo in local ecology, as well as their behavior, biology, and general characteristics deduced from Corbett's years of observations and research in the field. Corbett identified over 170 different species in the dingo's diet, and developed a system of identification of the dingo as distinct from other canines by formulating a series of skull measurements. Through examination of over 100 canid skulls, he ascertained that the dingo and the feral dogs of south-east Asia were the same species. Other researchers have challenged this stance, archaeologist Klim Gollan (1982) had claimed a closer resemblance to the Indian wolf, and recent DNA evidence indicates connection with east Asia (Oskarsson et al. 2011). For a detailed and up to date review of papers on the origin of the dingo see *Dingoes and Aboriginal social organization in holocene Australia* by archeologist Jane Blame, 2016. For the most recent and detailed study on dingo identification and taxonomy see *An updated description of*

the Australian dingo (Canis dingo, Meyer, 1793) by Crowther, Fillios, Colman & Letnic (2014).

The work of genetic scientist Allen Wilton in 2001 successfully isolated dingo DNA satellite markers, providing a method to identify the living dingo from the domestic canine (without the need for skull measurements, that could only identify deceased canines). Wilton's work was the first to give evidence supporting the dingo as representative of an ancient canine, and that they had survived genetically isolated from other canine species for thousands of years. Savolainen et al. (2004) expanded on this through mtDNA studies, indicating that dingoes had lived in isolation from other populations of dogs for around 5,000 years, and had originated from a small (possibly single) founder event from east Asia. Therefore "after >3,500 years of isolation, the dingoes represent a unique isolate of early undifferentiated dogs" (p. 12390).

Corbett was instrumental in having the dingo listed as an endangered species on the International Union for the Conservation of Nature (IUCN) Red List, as vulnerable, in 2004. Corbett claimed that hybridization with domestic dogs was the greatest threat to the dingo's survival. His lack of differentiation between the contemporary feral dogs of south east Asia and the dingo of Australia did challenge (and undermine) their representation as an identifiable and irreplaceable 'Australian' species, so the genetic research is particularly interesting in terms of heritage value.

In 2010, biologist Brad Purcell published DINGO (CSIRO), examining dingo identification, ecology and behavior, and their positive influence on the Australian environment as a hypercarnivore. Purcell's work is noteworthy in that he challenges the conventional ideas of what is a hybrid or pure dingo. Presumptions that certain morphological traits are indicators of hybridity, such as brindle or patchy pelage, are shown through Purcell's research to be an unreliable measure. Early historical records of pelage colors confirm this, and complicate narratives around heritage value, or the status of specific dingo populations, if 'purity' is going to be a central argument for conservation of the species. Purcell's conclusion is that the function of the canine is more important than any concerns for genetic purity.

The conflict between dingoes and livestock continues to reinforce the need for lethal controls, and this is embedded in policy and legislation throughout Australia. Purcell's work concludes that a shift in culture is necessary before positive management of the

dingo will be accepted by the Australian community – a position well supported and mapped out in the work conservationists including Kevin Frawley *EVOLVING VISIONS: ENVIRONMENTAL MANAGEMENT AND NATURE CONSERVATION IN AUSTRALIA* (1994). Both Frawley's theory and Purcell's proposal towards a number of non-lethal management techniques are discussed in the final Chapter 18.

In 2015 animal psychologist Bradley Smith edited another CSIRO publication *THE DINGO DEBATE*, examining the malleability of the dingo narrative in scientific discourse. The publication looks at dingo identification, biology and behavior, their origin, conflict with livestock, Aboriginal history and conservation. The preservation of the dingo is a central theme, with the role of the dingo as a stabilizing influence on the Australian environment discussed in ecological and historical context. However this remains a long way from the reality of the laws and legislations that continue to govern management of the dingo in the wild. The publication concludes that captive populations of dingoes are an essential element in the preservation of the species and in promoting public education and conservation, while the complicated politics of dingo management is debated. Smith & Litchfield also published *A review of the relationship between Indigenous Australians, dingoes (Canis dingo) and domestic dogs (Canis familiaris)* in 2009, providing an appraisal of many anthropological accounts of dingoes and dogs from historical sources. They concluded that the dingo had some positive roles in Indigenous society but also many negative effects such as "interruption to hunting, camp life, and religious ceremonies as well as a burden on scarce resources" (2009, p. 125). My own findings and those of Samantha Phelan in her manual *CONDUCTING DOG HEALTH PROGRAMS IN INDIGENOUS COMMUNITIES: A VETERINARY GUIDE* (2007), differentiate clearly between the function of the dingo and the domestic dog in Aboriginal society. I conclude that one is a symbiotic partnership (dingo–human) and the other is a culturally incompatible and problematic relationship (dog–human).

Other books with a more general focus on human–animal studies include Margo DeMello's *ANIMALS AND SOCIETY. AN INTRODUCTION TO HUMAN–ANIMAL STUDIES* (2012), this publication defines the methodology and theoretical starting points for research in the emerging field of human–animal studies (HAS). Functionalism, social stability, animal roles in human society and human attitudes towards them form the basis of the emerging discipline. Conflict theory has valuable

application in HAS, in the exploration of animal exploitation, animal cruelty, and other areas relevant to dingo–human studies, including human–wildlife conflict. De Mello established the importance of symbolic interactionism to the field, examining “how humans construct the social world and create meaning within it via interaction and use of symbols” (2012, p. 21). The dingo provides a complex, multifaceted subject for examination within these frameworks.

Professor of comparative anatomy, N. W. G. Macintosh, left an archive of his dingo research, spanning 1947–1975, in the J. L. Shellshear Museum at the University of Sydney. His work is summarized in *The Dingo – A Review* by B. Barker and Ann Macintosh, and in A.P. Elkin *N. W. G. Macintosh and His Work*, October 1978. Macintosh published *Trail of the dingo* (1956) in *The Etruscan*, and a book chapter *The Origin Of The Dingo: An Enigma* in M. Fox’s *THE WILD CANIDS THEIR SYSTEMATICS, BEHAVIOURAL ECOLOGY AND EVOLUTION* (1975)

Macintosh’s work commenced as a conventional study of dingo–human conflict, dingo behavior and physiology in the 1950s – including research into establishing an effective way to eliminate the species through biological control. After his first decade of work, Macintosh had a change of heart and spent the final two decades of his life examining the positive relationship between the dingo and the Australian environment – including how they could function successfully within agricultural regions. Macintosh left a sizeable collection of notes, photographs and newspaper articles that is available in the J. L. Shellshear museum, including results from behavioral trials on a captive population of dingoes raised on campus at the University of Sydney. These documents, audiotapes, and still images are available for access. However, Macintosh’s work has in general not had any influence on policy and legislation on dingo management and control.

The work of Deborah Bird Rose provides an in-depth record of the dingo within the cosmology of the remote Yarraliin Aboriginal community in the Northern Territory: *DINGO MAKES US HUMAN* (1992) and *WILD DOG DREAMING : LOVE AND EXTINCTION* (2011). Rose is Professor of Social Inclusion, and founding member of Environmental Humanities at the Australian National University. The central themes of social and ecological justice, and the processes of extinction, permeate Rose’s writing. She examines the dingo’s multi-species environment and where they are

placed within Aboriginal environmental ethics. *Nourishing Terrains, Australian Aboriginal views of landscape and wilderness* (1996) *Love and Love and reconciliation in the forest: a study of decolonization* (2002), and *The Goodness of Flying Foxes* (2014) detail Indigenous traditions that include obligations of care, webs of reciprocity, the multiple connections between humans, animals and country. *Slowly ~ writing into the Anthropocene* (2013) starts out with a description of a contemporary dingo tree, the 'strange fruit' are the hanging dingo carcasses left by trappers, following a 200 year old colonial tradition. Rose gives insight into the harm caused to Indigenous people when the animals important to their spiritual and physical wellbeing, are treated in this way. Rose's work complements the writing of ecologist Arian Wallach, fellow at the Center for Compassionate Conservation at the University of Technology, Sydney (UTS). Wallach published *Promoting predators and compassionate conservation* (Wallach et. al. 2015). *Novel trophic cascades: apex predators enable coexistence* (Wallach Ripple & Carroll, 2015). *The virtuous circle: predator-friendly farming and ecological restoration in Australia* (Johnson & Wallach 2015), looking at the positive influence of the dingo on native ecosystems and in agricultural zones. The *Status and ecological effects of the world's largest carnivores* (Ripple et. al., 2014, p. 151) describes the importance of Carnivora in the food web:

Large carnivores deliver economic and ecosystem services via direct and indirect pathways that help maintain mammal, avian, invertebrate, and herpetofauna abundance or richness. Further, they affect other ecosystem processes and conditions, such as scavenger subsidies, disease dynamics, carbon storage, stream morphology, and crop production. The maintenance or recovery of ecologically effective densities of large carnivores is an important tool for maintaining the structure and function of diverse ecosystems.

Wallach's *Reviving Ecological Functioning Through Dingo Restoration*, (2011) highlights the role of the dingo in ecological resilience through the process of trophic regulation, controlling the density and movement of marsupial populations and suppressing populations of foxes and feral cats.

Wildlife researchers Treves and Karanth's investigation into *Human-carnivore conflict and perspectives on carnivore management worldwide*. in *Conservation Biology*, interrogated the processes and conflicts of carnivore management, advocating for non-lethal control of carnivores, writing (2003, p. 1496):

Carnivore management is as much a political challenge as a scientific one ... As a result, carnivore managers must now invest in intense and prolonged public outreach and engage social scientists to study public approval for management tactics.

In the field of pest management, Penny Olsen *PEST ANIMALS. NEW SOLUTIONS TO OLD PROBLEMS* sets the 'gold standard' in pest control in Australia. This book was funded by the Federal Government and published in 1998. It contains many highlights for the human–animal scholar, including acknowledging problems with public perception of targeted species, and critiques a good deal of misinformation that has shaped current policies of eradication affecting listed animals – including the dingo. Olsen wrote (1998, p. 20):

There is an increasing expectation in many sectors of the community that all animals, including pests, will be treated humanely ... In reality, the true status of an animal is often irrelevant- it is how the animals is perceived that determines its pest status ...

This is particularly relevant to the management of the dingo as the species is classified as a 'Declared Animal' (pest species) across most of Australia and subjected to lethal controls as outlined in Table 4, pp. 241-42.

Few of the recommendations in Olsen's book have been implemented (personal correspondence, 2015):

The approaches outlined in the book are still the gold standard, but rarely get applied. For example, you often see in a action plan that something will be 'adaptively managed', but to do that requires appropriate monitoring, which is rarely done/funded.

Anthropological accounts detail historical and cultural dingo–human encounters. Donald Thomson provided detailed records and photographic images of the dingo in traditional Aboriginal society, from his research in the remote central desert and Arnhem Land in the early 20th century. Thomson's visual archives informed Chapter 8 *Walking the Thylacine* on the keeping of Indigenous companion animals. From Thomson's records, along with the publications of Herbert Basedow, and a number of other naturalists and anthropologists, a broader context to the dingo–Aboriginal relationship emerges, in terms of transient nature of the dingo–human companionship. In 1788 British marine Watkin Tench (Flannery, Nicol, & Tench, 2000, p. 54) stated in

observation of the Aboriginal people: “The only domestic animal they have is the dog, which in their language is called Dingo...” Since that time, there has been very little written about these human–animal encounters, traditions of care, or the numerous other species that also shared camp with the Aboriginal people and their dingoes. This is an area that I also explored in further detail, through historical and ethnographic records in context with the lives of women and children in the traditional communities in Chapters 6 and 7.

The history of dingo control, including the institutionalization of poison, aerial baiting and the dingo fence are areas of environmental management that have been the focus of various studies. James Woodford’s *THE DOG FENCE. A JOURNEY ACROSS THE HEART OF AUSTRALIA* (2003) provides a cultural history of the fence, as well as a vivid portrayal of the culture of the people that keep it standing. On the history of the application of poison to control native wildlife, Eric Rolls (1969) *THEY ALL RAN WILD. THE ANIMALS AND PLANTS THAT PLAGUE AUSTRALIA* provides one of the most exhaustive studies. The dates that I found in my research relating to the use of strychnine and fencing wire in pest control are much earlier in colonial history that Rolls had been able to uncover through his extensive but time-consuming manual searches. The extent of the distribution of poison is much greater than has been documented or acknowledged before, perhaps demystifying the cause of extinction events that occurred before the 1880s, and again with intensity after aerial baiting was introduced in 1947.

Merryl Parker’s thesis: *Bringing The Dingo Home: Discursive Representations Of The Dingo By Aboriginal, Colonial And Contemporary Australians* (2006), applies the discipline of linguistic analysis to historical descriptions of the dingo. Parker examined the rhetoric surrounding the dingo and how this influenced attitudes, and the harsh treatment of the dingo in social, political and legal contexts.

The current debate about the management of the dingo involves two diametrically opposed schools of thought: the dominant attitude supports the lethal management of the dingo as a necessary and unavoidable process in the healthy functioning of the agricultural and livestock economy. See Appendix 1, on public attitudes to wild dogs and dingoes, summarized from a survey by ABARES 2014 (Wicks, S; Mazur, K; Please, P; Ecker, S & Buetre B, 2014). Invasive species biologists B. Allen, P. Fleming, L. Allen, R. Harden, L. Corbett and P. Thomson have published extensively in this

area, including Allen et al. (2013) *As clear as mud: a critical review of evidence for the ecological roles of Australian dingoes*. This area of research is supported through the work of the Invasive Animal Co-operative Research Centre (IACRC), partnering government and agricultural industry stakeholders, arguing that the positive role of the dingo in ecology may be overstated. At the opposite side of the scientific debate are ecologists and conservationists, including Mike Letnic, Euan Ritchie and Chris Dickman (2012) whose paper *Top predators as biodiversity regulators: the dingo *Canis lupus dingo* as a case study*, argue for positive management of Australian dingo populations as a method of ecological reconstruction.

Another voice for the dingo has emerged out of the humanities and eco-feminist studies, including the work of Fiona Probyn-Rapsey (2015), *Dingoes and dog-whistling: a cultural politics of race and species in Australia*. Here Probyn-Rapsey takes a more nuanced approach to the issue of dingo advocacy and animal welfare and rights, suggesting the sentient animal is of central consideration, not populations or genetic purity which have entered the dingo narrative. The animal's classification strays into areas of race relations, and the messy world of dingo identification. Hybridity becomes tangled up with extinction, "where 'hybrids' are deemed eradicable in order to conserve an imaginary purity" (p. 57). This brings the literature review around to the writing of Val Plumwood and Helen Tiffin (Tiffin, 2009, p. 4):

Val Plumwood (2001) who links her philosophical attack on the dualistic thinking that continues to structure human attitudes to the environment in the masculinist, 'reason-centered culture' that once helped secure and sustain European imperial dominance, but now proves ruinous in the face of mass extinction and fast-approaching 'biophysical limits of the planet'...

There is potential to find novel solutions to problems facing the management of the dingo through dialogue between these various disciplines engaged with very different concerns and dynamics within the dingo-human interface.

PART A

THE DINGO ETHNOGRAPHY

2 CULTURAL KEYSTONE SPECIES

2.1 Introduction

In this chapter I examine the tangible heritage of the dingo, as represented through museum ethnographic collections, artworks, and archival records. The aim is to present evidence that clarifies the cultural keystone status of the dingo within Aboriginal society and as a significant figure in Australian heritage.

'Keystone species' is an ecological term used to describe species that are pivotal to the structure and resilience of ecosystems (Levin, 2013). Effectively they are ecosystem architects, exerting a disproportionately large influence on the configuration and functioning of the environment despite a relatively small population base. Where their keystone role provides an important service to human society, these species become embedded in the cultural system that both utilizes and supports the continued health and fitness of the species.

'Cultural keystone species' are defined as plant and animal species that are valuable food sources, used for medicinal purposes, clothing, or of high ethnographic value (involving ornamental or ritual applications) and further described by Garibaldi & Turner (2004, p. 1):

These species often feature prominently in the language, ceremonies,

and narratives of native peoples and can be considered cultural icons. Without these “cultural keystone species,” the societies they support would be completely different ... These are the species that become embedded in a people’s cultural traditions and narratives, their ceremonies, dances, songs, and discourse.

Historically, interconnections between nature and culture played an essential role in the maintenance of resilient ecosystems and biodiversity (Garibaldi & Turner, 2004). The marginalization of cultural and ecological keystones results in the degradation of ecosystems, the loss of traditions and cultural diversity. Their loss leads to changes in the webs of social and ecological reciprocity and ecosystems and culture. Rose demonstrates how this functions within the totemic system of land care (1992, p. 28):

With land based totems there is a three-way relationship between the people, the species, and the country. The totemic relationship invariably requires that people take responsibilities for their relationship with another species, and learn that their own well-being is inextricably linked with the well-being of their totemic species ... (and) responsibilities toward that land.

Garibaldi & Turner (2004, p. 5) developed a systematic process for identifying cultural keystone species, encouraging the utilization of this knowledge as an avenue of social and scientific enquiry in support of conservation and restoration projects. They developed the following methodology to identify key ethnographic indicators, including animals and plants, as follows (my summary):

1. The intensity, type, and multiplicity of the species’ use within human society.
2. The naming and terminology present in a language, including their representation as seasonal or phenological indicators.
3. Their role in narratives, ceremony, ritual and symbolism.
4. The persistence in memory and use in relationship to cultural change (here the species can be used through story telling, to explain changes to social or environmental conditions).
5. The extent to which their role cannot be replaced or substituted

Today there are many labels applied to the dingo in government organizations and

policy, law, agricultural groups, and through media representation. This includes labels such as: native canid, Australia's wild dog, keystone species, declared animals, feral animals, vermin, pest species. The Queensland Government declared animal fact sheet (2010) states (see also Table 4, pp. 241-42):

The dingo was not a part of the ancestral fauna of Australia ... Under the Land Protection (Pest and Stock Route Management) Act 2002 the dingo/wild dog is a declared Class 2 pest animal. It is the responsibility of landholders to reduce the number of dingoes/wild dogs on their property.

They are listed as a biosecurity risk, along with 12 other species including the fox (*Vulpes vulpes*), cat (*Felis catus*), rabbit (*Oryctolagus cuniculus*), feral pig (*Sus scrofa*), and the plague locust (*Chortoicetus terminifera*) – to not eliminate them from private land carries a penalty of up to \$44,000 (Queensland Government Business and Industry portal, 2016).

Concurrently the Queensland Department of Environment and Heritage Protection (2016) information webpage on the dingo, reads:

The dingo – Australia's only native canid, is descended from south Asian wolves ... The dingo has a role as an apex predator and is also believed to play a role in the natural environment...[they] hold a significant place in the spiritual and cultural practices of some Aboriginal and Torres Strait Islander communities.

This status does not afford the dingo any protection under current laws, and limited but ineffective protection in National Parks (see Table 4, pp. 241-42). The failure to acknowledge and accommodate the cultural status and protection of the dingo in political systems and policy-making is problematic, and has social and ecological consequences. Garibaldi & Turner explain (2004, p. 15):

These species may help to highlight land use patterns, traditional ecological knowledge and cultural values. They provide valuable information on the ecological characteristics of an area with considerable historical accuracy that has been passed down from generation to generation.

This first chapter aims to address these issues of identity and belonging through a

detailed account of the ethnographic records highlighting the dingo's presence and status within Aboriginal society.

2.2 Linguistics & Ethnography

... to bestow a name on something or someone, has a very special, almost solemn significance. In naming something, we extricate it from a disturbing anonymity, to endow it with a genealogy and to include it in a complex of specific words, to locate it, in fact, in the identity matrix of our culture (Moscovici 2000, p. 45-46)

In 1788, the Australia continent had an estimated population of 750,000-1,000,000 Aboriginal people (Flood, 2006). Over 250 Indigenous languages were spoken across the country (Sculthorpe, Bolton & Coates, 2015), including as many, or more words for the native canine. They each communicated specific connotations and nuances unique to the local region, resource, geography and customs. This was backed by 4,600 years or more of coevolution since the maritime arrival of the canine to the Australian mainland (Oskarsson, 2011). Archaeologists Balme, & O'Connor stated (2016, p. 777): "it is difficult to find an ethnographic/historical image of mainland Aboriginal camp life or gatherings that does not include dingoes."

The diverse range of recorded names for the dingo include: *warrigal*, *noggum*, *boolomo*, *kal*, *dwert/dwer-da*, *kurpany*, *ngupanu*, *parrutju*, *tjantu*, *yinura*, *yekyn*, *doorda mokyn*, *werrenwillum*, *ngurran*, *toort*, *alee*, *myeye*, *merry mèhee* (for localities see: Breckwoldt, 1988; Cahir & Clark, 2013; Smith & Litchfield, 2009). Often there were two names for the dingo in the same dialect, differentiating between wild and camp populations: *maliki* (camp dingo), *wantibirri* (wild dingo), *tingo* (tame), *mirrigung* (camp dingo), *joogoong* (wild dingo), *papa* (wild dingo), *papa inura* (camp dingo). Smyth (1878, p. 149) further listed *purung* as the general name of the dingo in western Victoria, but *pip kuru* refers to the male, *nrungyrreh* for the female.

Anatomical items used for ceremonial purposes or for ornamentation, add further complexity to the vernacular. The skin of a dingo tail, worn on the upper part of the forehead as an ornament was called *durda-dyer/dwerta-der* in the *Noongar* dialect of south-west Australia (Whitehurst, 1990). This headdress was illustrated in studio portraits from 1872 in Figures 2-1 and 2-2. These traditionally were worn by men, but

there were records of dingo headdress also made for women, and collected by Baldwin Spencer at Mcarthur River, Gulf of Carperteria (Spencer & Gillen, 2013).

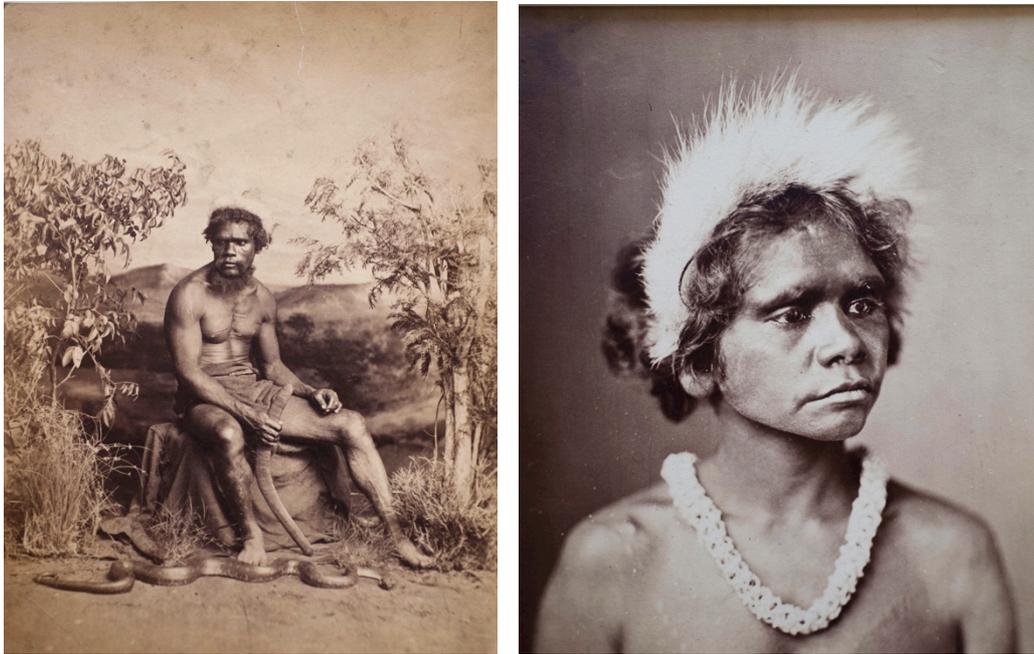


Figure 2-1 & Figure 2-2: The skin of a dingo tail, worn on the upper part of the forehead. Clarence River NSW PRM-1998.186.6.1 & PRM 1998.249.11.2 Photos: John William Lindt (1872) Source: Pitt Rivers Museum

There were a number of other applications for dingo body parts, both ceremonial and utilitarian. Robert Brough Smyth, author of *The Aborigines of Victoria* (1878), described a hunger-belt worn by warriors when they had to travel rapidly or in secrecy across hostile territorial ranges. The belt was made of the skin of the dingo (*Wer-ren Willum*) and called *ber-buk* in Victoria. This was tightened as the journey progressed to alleviate hunger (Smyth, 1878, p. 272). Smyth also mentioned the dingo tail, *wreka baanda*, the back of the wearer. Figure 2-3 and 2-4 are photographs of similar headpieces collected by ethnographers, Baldwin Spencer and Francis Gillen, in northern Australia, 1901–1902.



Figure 2-3 Neck band of fur string with dingo tail pendant. Anula Tribe, MacArthur range, Gulf of Carpentaria. Spencer & Gillen Expedition 1901-2, PRM-1903.39.12.1 Source: Pitt Rivers Museum. Photo: J Philip 2013



Figure 2-4 Dingo tail Necklet. Six red ochre cords with dingo tail ornament attached. Reg. X010208. Spencer and Gillan collection. Mcarthur River, Northern Territory 1901-2. Museum Victoria /Photo: J Philip 2011

Walter Roth's paper on north Queensland ethnography, *Decoration, deformation, and clothing* (1910), recorded a wide range of plant and animal parts used in ceremonial and decorative dress – bone, feather, fur, plant fibers, gums and shells (Roth, 1910, p. 27):

In the Boulia District, a Dingo-tail may sometimes be worn over the forehead like a fillet and tied by strings at the back; sometimes feather-tufts may be stuck, and so supported in position, underneath it. The Dingo-tail was also worn by the Brisbane Males who called it a gilla; used at corroborees, fights, and first put on at the initiation ceremony.

The dingo tail was believed to contain great power, making it a highly sort after and valued item. The tail was commonly worn with a cord made of human or animal hair, commonly possum and sometimes dingo. Roth mentioned in 1906 that the tails were

first worn at the initiation ceremonies (1910, p. 27).

Captain Arthur Phillip recorded soon after arrival in Australia (1789): “Men in the ornaments of dingo’s teeth, lobster claws and small bones which they attached with gum.”

Figure 2-5 shows an ornament made of dingo hair and gum, collected in 1889, “painted red, white, yellow and black, for hanging from the beard”, the specimen was collected from south of Port Darwin, near Katherine, Northern Australia (museum label, Pitt Rivers Museum).



Figure 2-5 Ornament of dingo hair and gum 1889. PRM-1900.55.621. N. Hardy collection. Source: Pitt Rivers Museum/Photo J Philip 2013

Figure 2-6 shows hair ornaments, “Tufts of dingo hair worn in hair by native women” collected by Rev. E. Goddard, Western Australia pre-1909 (specimen label, Pitt Rivers Museum). These were bound together with plant fiber or sinew. As was commonly the case in collecting both ethnographic and natural science specimens, there was no additional information recorded in relation to the Indigenous ecological or cultural knowledge of these items. This was noted by scientific historian, Sally Kohlstedt, recording that while many of the specimens collected for the museums were collected by aboriginal people on behalf of the scientists, “unfortunately there are virtually no written records reflecting the Aborigine's point of view” (1984, p. 69). It can be ascertained from other records that these ethnographic items had been both decorative and of sentimental value, and that the dingo and their body parts were attributed with supernatural powers by many tribes (Roth 1901, Thomson 1948).



Figure 2-6 Tufts of dingo hair worn in hair by native women. Western Australia. Collected by Rev. E.H. Goddard 1909 PRM-1909.35.1 & PRM-1909.35.2. Source: Pitt Rivers Museum. Photo: J Philip 2013

The dog's teeth necklet "strung and mounted with red cloth" in Figure 2-7, was collected by A. C. Maddon in 1889, together with another the three layered dog teeth necklace made with traditional hair cord. It is uncertain if the necklaces represent specific 'dingo knowledge', however it demonstrates the accommodation of introduced resources including western fibers at this time into cultural traditions.



Figure 2-7 Necklet of dogs teeth, Torres Straits 1869 PRM-1889.34.11. Source: Pitt Rivers Museum. Photo J Philip 2013

Figure 2-8 is described in the Pitt Rivers Museum catalogue as a magic ball of black gum with dingo/dog's tooth attached with sinew, a charm pendant, believed to be used for rain incantation. This was collected by Norman Hardy, 17 March 1897 "near some sandy country in the South portion of Kimberley, Western Australia" (PRM data sheet).



Figure 2-8 Charm pendant made of gum and dingo/dog's tooth Pre-1897. PRM-1900.55.001 Source: Pitt Rivers Museum/Photo J Philip 2013

Roth also mentions bone pendants in northern Queensland (1910, p. 25):

Knuckle and similar bones from the kangaroo or dingo, and up to about two and a half inches in length, are fixed with cement by string to the tuft of the hair over the temporal region, whence they dangle one on each side in front of the ears, in the Boulia and Upper Georgina Districts.



Figure 2-9a & Figure 2-9b Funerary containers (replicas, 1963) from Groote Eylandt, Arnhem Land Ref. 72.1964.180-1 & 2. Source: Musée du Quai Branly, Paris.

Musée du quai Branly collection, Paris holds a collection of funerary containers from Groote Eylandt, Arnhem Land, decorated with dingo teeth (replicas, 1963), Figure 2-9 and Figure 2-10. The catalogue entry reads:

Funerary containers in which women wear the bones of their dead...wood, white, red, yellows and black pigments, string, feathers, fangs of wild dingo dog.

To many tribes, the dingoes were seen as creatures of the spirit world, messengers between the living and the dead (Tacon & Pardoe, 2002). At an archeological site in Koorong Waters, South Australia, a row of dingoes was discovered buried in a boundary line outside of the camp settlement, separating the human burial ground from the camp site – interpreted to be providing protection for the people against marauding and malevolent spirits.

Skins of dingoes and other animals also had utilitarian applications, and were made into water-carriers to transport water long distances (*Aboriginal Water Quest*, 1895, p. 4). The following record is from 1906, north west Queensland (Thomas, 1906, p. 52):

As water-carriers a number of objects were used...When water has to be conveyed long distances, the skin of an animal is a natural method of preserving it; kangaroo, opossum, or dingo skins serve in this capacity. They are taken off, the neck being cut through high up and the forepaws cut off close to the body; then it is tanned with coolibar gum, the various openings are closed by transfixion with a peg which is wound round with twine or tendon; the two hind-legs are tied together to serve as handles; the whole is carried in the hand or may be slung over the shoulder.

2.3 Morphology of the Dingo

Aboriginal tribes also had names to distinguish between different coat colors and physical characteristics. The most recognizable dingo had distinctive sandy-ginger coloring, but many variations in pelage were recorded (see Crowther, Fillios, Colman, & Letnic, 2014). In Western Australia, a dingo with brindle pelage was called a *marru* (*Warrigal's family tree*, 1955). It was described as a large dog with heavy jaws, high forequarters and a lean tail (similar to the dingoes in southern alpine regions, that can

still be found today). The Aboriginal tribes in WA considered the *marru* the most suitable type of dingo to train as a hunting dog. The white dingo they called *billbaroo*, resembling a kelpie in appearance but reportedly with a smaller head and bushy tail. The yellow and black dingoes were known as *warragoos*.



2.4

Figure 2-10 Dingo Naturalis Biodiversity Centre, Leiden, mid to late 19th Century. Photo J Philip 2011

The sandy/golden colored dingo has been the most widely collected and exhibited (in both zoo and museum collections). Other colors with the occasional exception of white, and black & tan dingoes, were generally thought of as hybrids throughout the 20th century. This assumption has recently been questioned due to a number of differing 19th century records emerging in the archives, from remote areas of Australia, and developments in modern technological diagnostic tools (see Crowther, Fillios, Colman, & Letnic, 2014).

One example of a brindle dingo was recorded by British army Lieutenant George Grey, on the first land survey of the Kimberly's in 1837 (*Warrigal's family-tree*, 1955). Grey wrote:

There is a brindle, a large dog with heavy jaws, high forequarters, and a high degree of intelligence; it lives in limestone blowholes and has the habit of entering its lair surreptitiously and scratching back dirt and debris over the entrance, The natives prize this dog as a hunter, claiming it's the best killer and sticks to a scent.

Figure 2-11 shows an early mounted specimen of a dingo/wild dog from Western Australia, of brindle pelage that is held in the stores of the Naturalis Biodiversity

Centre (NBC) in Leiden, Netherlands. Under the stand of the mount, taxidermists customarily left a note with provenance and details specific to the specimen, and pasted the label to the underside of the stand for posterity. The record gave some historical and cultural context to the exhibit. The label on the NBC mount read:

The wild or native Australian Dog. Female. Natives name *Yekyn* or *Doorda mokyn*. It is a sly, cowardly animal, very troublesome at sheep station and among poultry. This specimen having passed through the town of Fremantle in the night in quest of hen roosts was killed by a native near the gaol hill on the day following. He would only part with the tail for a considerable sum, it is much esteemed by the native men for a head dress.

The specimen was situated at the back of the NBC mammalian storage room, and unregistered – assumed to be a hybrid, and therefore of little conservation value (Wendy van Bohemen, Collection manager, mammals, NBC, personal conversation). However, this may not have been the case, as noted by zoologist, Ellis Troughton, (1947, p. 233):

The range of [dingo] colour variation is greater than one would suppose, and the early explorers referred to seeing yellowish-white, piebald, and blackish individuals.

As a result, hybridization might be more difficult to tell from the colour of the pelage than previously believed by ecologists (see Newsome & Corbett, 1985). On examining the NBC label, Dr Moya Smith, Head of Anthropology and Archeology at West Australian museum, wrote in relation to the tribal originals of the names *Yekyn* or *Doorda mokyn*, that were recorded on the label (personal communication, 2015):

The language of description sounds very mid to late 1800s to me, is also certainly reflects local language names for dingo. The Perth Aboriginal people are *Whadjuk* [*Wadjuk*], or *Whadjuk Noongar*. *Noongar* [*Nyoongar*] is a general term for Aboriginal people of the South west, *Whadjuk* is the particular language group for the Perth area.

Lacking any other details of provenance, the label suggests that the specimen originated from the Perth area, with connections to the *Whadjuk Noongar* people, mid to late 19th century.

Not all representations of the dingo in relation to Aboriginal society have been presented in a positive light. Anthropologist Ian McIntosh (1992) described the *Yolgu matha* language in north-east Arnhem Land as having two words for dingo, *warang* or *wakana*, directly translating as ‘having nothing, or belonging to no-one’. “As a species” wrote Ian McIntosh in his 1992 thesis, “the dingo has little economic value”. McIntosh was referring here to the lack of utilitarian value of the dingo within *Yolgu* culture. Mythology recorded by Macintosh had a focus on the anti-social behavior and exclusion of the dingo in the region, and tells of the arrival of the dingo-dog by boat, as re-enacted in ceremonial rituals recorded by Donald Thomson (1948). Thomson was initiated into the ‘*Mildjingga*’ dog clan, and his records describe the dingo as an important figure in Arnhem Land culture.

The ceremonies and rituals of the northern tribal groups, were heavily influenced by the Macassan people of Sulawesi (Indonesia), (Thomson, 1948). The shifting alliance and conflict between Aboriginal people and the seafaring tribes dates back hundreds of years (Breckwoldt, 1988). The Macassan’s traditionally made annual trips to harvest trepan and pearls along the northern coast line. The lines blur here between dingo and dog history, with evidence that both travelled back and forth with the Macassans over time. To use this mythology as definitive proof of a single founder event for the dingo population, as claimed by a number of dingo researchers including Corbett (1995) and McIntosh (1992), excludes other tribal origin stories of dingo migration (e.g. Roughsey, 1971). Equally, to cite the use of myth-making that holds up the ‘antisocial’ dingo as an example of how not to behave (McIntosh, 1992), as representative of other tribal relationships with the dingo, would be unfounded. Rather, they illustrate the complexity of the human–animal interface and different levels of inclusion of the dingo into Aboriginal life across the continent, as influenced by social, historical and environmental factors.

2.5 Conclusion

Due to the level of cultural diversity across Australia, previous studies of the dingo’s role in Aboriginal ceremonial and social life have often been restricted to one particular tribe (for example, Rose, 1992; Thomson, 1962) or region (see Cahir & Clark 2013). There has, however, never been a detailed study specifically on the dingo

ethnographic items held in museum institutions, and this material is very rarely if ever placed on public exhibition. This has led to a paucity of information on this area of cultural heritage, and also some confusion over the role of the dingo in traditional society.

While providing a comprehensive archive of information is beyond the scope of this thesis, this sample collection is evidence of key themes that emerge in the study of dingo symbolism, and provides evidence of the diversity and the depth of inclusion of the dingo in traditional Aboriginal culture across Australia. The specimens illustrated are representative of areas from Western Australia, Northern Australia, Queensland, Torres Straits and New South Wales. The decorative items were worn in various contexts by both men and women, and made of the bone, hair, skin, and tail of the dingo. They were bound together with gum and/or animal fibers – traditional platted cord made from the hair of the dingo, or human, possum or other source, and dyed with ochre.

As talisman's, the dingo ethnographic items had symbolic value and in special cases represented magical powers, talisman's of protection, power and strength in life and in the afterlife (here the term 'afterlife' refers to the spiritual dimensions of cultural life). They were also used in ceremonial contexts, and associated with rain incantations and love magic (see Chapter 7.3, p. 80). Much of the information about dingo knowledge though, is specific to each region, and it is often classified as 'secret women's business', or as belonging only to the dingo Lawmen, described here by anthropologist Diana Young (2010, p. 102):

The dingo is, according to the women who taught me, a '*watiku miilmilpa Tjukurpa*'—a secret, sacred Dreaming that belongs to men. According to Inngkatji in 2009, it is a *Tjukurpa*, which belongs to both men and women. This variation in who tells what and how is ubiquitous in Western Desert cultures where men's and women's roles in ceremony are complementary. One can extrapolate from these two statements that the dingo is a *Tjukurpa* belonging to men and thus women cannot speak directly about it although an individual may be knowledgeable (*ninti*), and that there are non-secret aspects to the Dreaming.

The secret and non-secret dingo Dreaming stories, are still present in artistic and cultural traditions. It is not uncommon, though, to find no trace of the dingo in

museological displays in cultural collections, and equally for the dingo to not be represented in popular galleries selling Aboriginal art for the local and international market. This is partly attributable to the paucity of value that has, in the past, been assigned to the dingo as a heritage 'item' (this is explored in depth in the chapters on colonial history, Part Two Chapters 10 to 13), as well as the reticence and sensitivity of the Aboriginal people to discuss the topic. This has hindered the transition of dingo knowledge, much of which is beyond the scope of non-specialist research. However, there is a body of non-secret dingo knowledge accessible, and recorded through story telling, song, dance and artistic narratives.

The following chapter further explores these themes, through examining dingo representations in Aboriginal visual art.