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**Alien relations: Ecological and Ontological Dilemmas Posed for Indigenous Australians in the Management of "Feral" Camels on their Lands**

Petronella Vaarzon-Morel

## Introduction

The colonization of indigenous people and their lands typically involved the introduction of domesticated species integral to the development of settler economies. These animals were bound up with European social and ontological understandings that were profoundly different to those of the peoples being colonized—in particular, notions of the human–animal divide. In central Australia, Indigenous people have responded to introduced animals variously with fear, resistance, openness, creativity and resilience. In doing so, they have had to negotiate incommensurable differences and disjunctions, involving the nature of the animals themselves and the "pastoral" relations Europeans have with these animals compared to Indigenous people's totemically based relations with native animals.[1] Now, irrevocably entangled, they have to re-negotiate their relations with domesticated animals such as camels, which have become free-ranging and are increasing in number on their land. The management of these animals creates tensions and dilemmas for people who want to maintain proper relationships with their country and the other-than-human constituents who inhabit it. This chapter addresses the situation in regard to camels in central Australia, focusing on Aboriginal people who adopted camels for use as transport. It considers the conflicts and challenges people face in reconciling their responsibilities toward beings to whom they are ancestrally related with their responsibilities toward camels, with whom they have a shared history and whose cosmological significance has shifted with the adoption of Christianity. I argue that the choices people make have implications not only for other entities in their environment, but also for the people themselves and for their relational ontologies.

Although addressing a local case, the argument is relevant to questions of "whether and how ontologies can change" (Naveh and Bird-David 2014:74) and how transformations in people's relations with animals figure in such change—if at all (see, for example, Ingold 2000; Descola 2014a; Naveh and Bird-David 2014). To date, debates have largely centered on indigenous peoples with an animist ontology.[2] However, in his recent work Philippe Descola (2014) extends the discussion and, as it is of particular importance in thinking about relations between humans and animals and ontological change, I quote it at length here. In analyzing how different societies model nature–culture, Descola has delineated four practical and cognitive "modes of identification" that constitute different ontologies as follows: the naturalism of the Western tradition, the totemism of Aboriginal societies, the animism of Amazonian societies and the analogism associated with certain Chinese and African societies. Descola couples these with dominant "modes of relation" such as

[1] Furthermore, they had to confront colonial practices and representations of themselves that were linked with European attitudes toward domesticated animals and the perceived capacity to transform the land (see Reynolds 1986; Povinelli 1995; Ingold 2000:64; Franklin 2006:48).

[2] In particular "whether either evolving animal husbandry or hierarchical inter-human social relations co-occur with either ceasing or beginning to perceive animals as co-persons" (Naveh and Bird-David 2014:75).

predation, reciprocity and protection to arrive at “schemas of practice”. According to his matrix, the naturalism of Australian settler society objectifies nature in that it recognizes physical continuities between human and animals but posits a “discontinuity of interiorities” (Descola 2014a: 172). In contrast to naturalism, Descola (2014a:165, 201) characterizes the animistic form as one in which human and other-than-human animals have different physicalities but similar interiorities such that both “mutually apprehend[ing] each other as subjects engaged in a social relationship”. He describes the Aboriginal totemic mode as a symmetrical one in which people and animals of the same “totemic collective” share physical and interior (selfhood–temperament–intentionality) characteristics that are realized in Dreaming beings (2014a:165,172). According to Descola (Kohn 2009:145), because Aboriginal Australians do not personalize relationships with totemic animals in the way that animists do, they have “downplayed” or “inhibited” the “consequences” of recognizing animals as animate, intentional beings whom they communicate with and respect. While Aboriginal people do not personalize their relations with animals in the same ways that animistic hunter-gatherers do (see, for example, Nurit Bird-David 1999; Ingold 2000; Scott 2006 and this volume; Nadasdy 2007; cf. Knight 2012), my chapter shows that the Aboriginal situation is more complex than Descola’s characterizations indicate. I discuss contexts in which people recognize animals as subjective beings whom they must respect and how people’s concern about consequences articulate with their evolving relations with camels. In doing so, I attend to the changing social and biopolitical contexts in which people’s relations with camels are constituted, and their subjectivities are “provoked” (Ortner 2005). The chapter contributes to scholarship on introduced and “invasive” animals (see Fortwangler 2013), showing that Aboriginal people’s responses to the exotic animals cannot be characterized simply in static, dichotomous terms of resistance–acceptance and belonging–not belonging (see, for example, Rose 2002; Franklin 2006:192; but see also Bowman and Robinson 2002; Trigger 2008). To do so elides the complex, contextual nature of people’s engagement with the animals and their unfolding ontological and ecological significance through time.

As well as being informed by long-term research with A<u>n</u>angu (Pitjantjatjara and Yankunytjatjara) and Warlpiri, the chapter draws on historical material, a study of Aboriginal perceptions of camels that I conducted in central Australia and more recent work (Vaarzon-Morel 2008, 2010, 2012; Vaarzon-Morel and Edwards 2012). The chapter is structured in three main sections. To contextualize contemporary issues, the first section indicates how people’s relations with camels have transformed over time and how this history has shaped their perceptions of camels today. I consider the nature of people’s early encounters with certain domesticated animals and then discuss people’s adoption of camels as a form of transport. In the second section I explore people’s changing relations with camels in the context of their relational ontology and mode of relating to totemic animals.

The third section focuses on the contemporary situation in which people confront increased numbers of free-ranging camels and their associated negative environmental impacts. Reflecting on findings from my earlier study on people’s perceptions of camels, I consider implications of the conjunction of people’s involvement in bioconservation programs with the implementation of a government-funded “feral” camel management program in which camels have been killed or removed from Aboriginal lands. In doing so, I suggest how camels figure in the redefinition of people’s relational ontologies and the re-articulation of their relationships to the land.

**Encountering European domestic animals**

The center of the Australian continent, in which Aboriginal people lived for millennia as hunters and gatherers, is comprised of desert and semi-desert regions with low and unpredictable rainfall. Although Europeans first settled the eastern coast of the continent in 1788, it was another century before they explored the arid interior, using horses, camels and donkeys to do so. For local Aboriginal peoples the concept of an animal being used for transport was alien because no autochthonous species could be so employed. While first encounters with Europeans have attracted considerable anthropological attention (for example, Veth et al. 2008), encounters between Aboriginal people and the animals that accompanied the strangers have not (but see Altman 1982; Vaarzon-Morel 2012). With accounts of such events being within living memory and revealing pertinent dimensions of Aboriginal ontology, they warrant greater scrutiny.

Most such accounts bear witness to the shock people felt on first coming across the alien beings. Drawing on early settler accounts, the historian Robert Kenny (2007) has discussed the reactions of Wotjobaluk people to the arrival of Europeans on horses in the early 1800s in Victoria. Employing the metaphor of the "centaur dismounting" and contrasting the huge size and bizarre forms and behaviors of animals such as horses and cattle to native animals, Kenny argues that it was not Europeans but their animals that had the most impact upon Aboriginal people's consciousness and worldview at first contact (Kenny 2007:168–169). Yet, he maintains, it was not a complete rupture because the Wotjobaluk were able to assimilate Europeans and their animals within their totemic framework of understanding. Kenny suggests that for Wotjobaluk, domestic animals such as horses, sheep and cattle were perceived as totems of the settlers. Noting the "mutuality of relations" (2007:172) that existed between animals and humans because of their totemic link to ancestral beings, he argues that apparently senseless killings of European animals by Wotjobaluk should be read as an attack on Europeans. Conversely, citing an historical account in which the lives of settlers were threatened after they offered a bull for slaughter to the Wotjobaluk, Kenny interprets the attack not as treachery (as the settlers did) but an attempt by Wotjobaluk to rid their environment of animals that were devastating it. Extending his argument, Kenny speculates that the incident was "an attempt to re-define and re-establish a relationship with the environment that had been disrupted" (2007:173). If indeed Wotjobaluk did assimilate Europeans and their totemic animal to their "relational schemas" (Descola 2014a), then their attacks demonstrate the significance of the material to the symbolic and also the centrality of transgressive behavior to the limits of co-existence. In effect, introduced animals were treated as invading strangers.

In contrast to the Wotjobaluk situation, colonization of central Australia occurred relatively late and historical accounts survive of people's reactions to the animals. Most accounts indicate that, at first, Aboriginal people regarded the creatures as kinds of monster. Individuals fled before them, while larger groups attempted to kill them (see, for example, Strehlow 1960; Reynolds 1986). As I have noted elsewhere (Vaarzon-Morel 2012), after their initial shock people made sense of the animals by mimicking them, by comparing their distinctive corporeal forms and behavioral attributes with those of familiar beings and by naming them. Many accounts also indicate that at first people attempted to interact with the animals using spoken language.[3] Intriguingly, according to the late Arrernte man Kwementyaye Johnson, when his people first saw a horse, they interpreted

[3] For example, Reynolds 1986; Kenny 2007:170; Tjilari 2009.

the flick of the horse's tail as it swished upward as the Arrernte hand sign for "what's happening?" (Jennifer Green, personal communication with author, July 12, 2012). What is remarkable in these accounts is the ontological openness that Aborigines exhibited when confronting alterity—that, despite having different corporeal forms to their own, people at first assumed the animals shared their personhood. In the event, the creatures' incapacity to interact *mutually* using language proved a distinguishing feature of personhood. Today, elders laughingly tell self-deprecating stories about their former ignorance of now-familiar horses and camels.

Encounters similar to those just described occurred across central Australia over several decades as Europeans ventured away from the Overland Telegraph Line. Once it became clear that the foreigners intended to stay, and as the impacts of their animals on the environment increased along with their numbers, Aboriginal people's tolerance lessened. The introduction of herd animals such as sheep and cattle in their thousands resulted in the despoliation of plants on which people subsisted and the defilement of sacred waterholes and other entities. Aboriginal people often retaliated, spearing and maiming the animals and defending themselves against the invaders (Reynolds 1986). In central Australia, competition between settlers, their animals and local people over access to waterholes contributed to intercultural conflict, displacing many people and having a negative impact upon their subsistence economy. Attracted by the possibility of obtaining tobacco and flour, numerous Aboriginal groups took up work on cattle stations established on their land. As I now outline, over time many people adopted camels for their own use, thus developing a new form of relationship with the animals.

**Developing engagements with camels**

From the late 1880s to the 1920s, dromedary camels were the settlers' choice of animal transport across the arid interior because, unlike horses and donkeys, they could survive for long periods without water. Aborigines assisted "Afghan"[4] cameleers, who were responsible for transporting goods on "camel trains" from the railhead in South Australia to settlements such as Alice Springs and Hermannsburg Mission in central Australia, and they learnt camel-handling techniques during this process (see Strehlow 1960; Vaarzon-Morel 2012).

In the late 1920s and 1930s, settler use of motorized transport increased and their reliance on camel transport diminished. No longer of value to them, hundreds of camels were shot, while others were released to range free in the bush. Suffice to say, such treatment demonstrates the ontological significance of camels for Europeans as objects and chattels. Subsequently, Aboriginal people obtained them from settlers in exchange for work or by capturing free-roaming camels (Rose 1965). By 1960 Aboriginal people near cattle stations and missions owned more than 250 camels (McNight 1969:100). However, in more remote places such as the Ngaanyatjarra region, people only hunted camels (Gould et al. 1972:265, 278).

A̲nangu, in particular, used camels to ride and carry belongings as they moved between missions and sheep and cattle stations, where they obtained seasonal work and traded dingo scalps with bounty collectors in return for European rations (see Rose 1965; Hamilton 1987; Vaarzon-Morel 2012). Additionally, as Robert Layton (1989:80) observed, A̲nangu from the Ulu̲ru region learnt "camel husbandry" techniques (see also

[4] The term was used to refer to camel handlers from north India and surrounding regions who worked with camels (see Jones and Kenny 2007).

Sandall 1969) and acted as cameleers for white people. Camels facilitated extended mobility, enabling people to visit kin and attend ceremonies in distant places. People used camels for transport until the early 1970s when, as a result of changed government policy, they obtained cash in place of rations and could purchase motorcars (Peterson 2009). In the process I have sketched, Aboriginal people developed a different kind of human–animal relationship than existed previously. Initially regarding camels as monsters, then forced to accommodate their invading presence, individuals nevertheless showed a remarkable open-mindedness toward them, and many people incorporated them in their lives.[5]

**Indigenous identifications and relations with animals**

Superficially, Aboriginal people's interactions with camels resembled those of settlers. Yet, there were significant differences arising from the nature of Aboriginal people's relations with autochthonous animals and their mode of engagement with camels. Furthermore, while settler and Aboriginal worlds overlapped, they remained substantially different. Descola notes that "domestication does not necessarily imply a radical change of perspective, provided the society remains a mobile one" (2014a). This was the case in central Australia; that is to say, Aboriginal ontologies were not radically transformed by the use of domesticated camels. I now consider this matter.

As is well known, Aboriginal people's relationship with native animals is totemic. People associated with particular tracts of country regard themselves as spiritually descended from Dreaming beings who gave form to their country. These beings, many of whom are themselves held to have taken animal form, further endowed country with all natural (including faunal) species, by travelling across the landscape, depositing their spiritual essence in the ground and becoming metamorphosed as features in the landscape. Stories, ceremonies and "doctrines" about such theriomorphic beings form the basis of Aboriginal cosmology (Keen 2004:133), and are commonly referred to in English as "Dreaming" (Jukurrpa in Warlpiri, Tjukurrpa in Pitjantjatjara and Altyerre in Arrernte). The Dreaming is not confined to a past period but continues in the present; in waking life people are constantly alert to the presence of Dreaming beings and signs of their activity and people may receive new stories and interact with the beings while they dream (Poirier 2004).

A characteristic feature of totemism is that it differentiates landed groups of people from each other; patrilineal clans in the case of Warlpiri and "person–sets" (constituted through various means including birth place) in the case of Pitjantjatjara (Sutton and Vaarzon-Morel 2003). At the same time, Dreaming tracks link individuals and groups belonging to the same totem. People directly identify with Dreaming beings from whom they are descended.[6] For example, they may identify as goanna, kangaroo or other animal people. The relationship is not merely symbolic but consubstantial: people share substances and attributes with ancestral Dreaming beings and may bear marks on their body that visibly identify them with their ancestor. Furthermore, people employ their knowledge of

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[5] Considering such "intellectual openness" toward introduced animals, David Trigger develops the idea of "'emergent autochthony' in Aboriginal cultures, whereby new species become 'naturalized', in cultural terms" (2008:630).

[6] Personal identity is also determined by people's conception Dreaming, in the case of Warlpiri, and place of birth in the case of Anangu.

social and physical characteristics of animals in constituting human social relations that differentiate according to gender and social status.[7]

However, for Aboriginal people, animals are not merely totemic entities with which it is "good to think" (Lévi-Strauss 1963:89). They are also sentient beings, with whom people may interact. While people perceive differences in the nature of animals in terms of physical and behavioral attributes, they also recognize certain qualities of personhood among them. For example, as Anangu elder Peipai explained to me: "All the little animals hold their own Tjukurrpa along with emu, kangaroo and dingo. They all have living bodies. Animals all have living animal bodies, in the same way that people do. People live in community groups and animals are exactly the same. You know, witchetty grubs, spiders, dingoes and people live in various different communities—well, they have the same existence. Human communities live the same kind of existence as animals. Animals have the same feelings inside towards their children as us" (cf. Meggitt 1962:252). However, while people perceive certain shared qualities among humans and animals based on practices of communal living and affect, other social practices serve to distinguish human personhood.

While all entities in the Aboriginal world are subject to Dreaming Law, the human social order is unique in symbolically and practically elaborating links with other beings. As Fred Myers noted, Aboriginal social practices involve distinctive cultural understandings that are "objectified and transmitted through a range of activities of kinship and social relations" (2002:104), especially in ritual. Human existence is regarded as the "same but different" to animal beings because of this fact. For example, one basis on which Warlpiri contrast themselves with dogs is that the latter mate indiscriminately and not according to human social rules instituted by Jukurrpa Law. Yet, as illustrated here, the differences that distinguish humans from animals are not understood as a radical separation of nature and culture.

Recently, Marshall Sahlins (2014:281) has critiqued Descola's ontological scheme, suggesting that totemism is but a form of "segmentary animism". In response, Descola stated that he was "adamant that the kind of relations that Australian Aborigines maintain with nonhumans of *every denomination* is very different" (2014b:298, emphasis added) from those of animist societies. In my view, however, Descola overlooks the fact that the nature of Aboriginal people's relations with animals differs according to whether they cohabit with them and form intimate bonds with them (as, for example, domestic dogs), or whether they co-dwell in country but live apart from the animals (as, for example, kangaroos). Reflecting this distinction, many Aboriginal people use the English terms "tame" and "wild", respectively, to refer to them. In doing so, the distinction made is between animals that tend to run away on encountering humans and those who have a trusting relationship, albeit one that may involve elements of domination, companionship or protection.[8] The distinction does not involve a correlation with wilderness as place,

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[7] For example, John Morton (1997:154, 170) describes how Arrernte "sociobiological" knowledge of native cats is employed in the *ingkura* fire ceremony, in which male novices attain seniority.

[8] Wild dingoes were hunted for food, and while people adopted dingo pups to raise, they did not selectively breed them (Meggitt 1965). Although people now also keep "European" domestic dogs, their relations with them differ to those that Europeans have with their dogs. For example, among Warlpiri, dogs roam freely and may be given subsection names, such as that of a parent, which denotes their role as guardians who protect people by warning them of strange beings.

because people regard their entire country as home (see Myers 1986). Significantly, animals such as dogs that live with humans are not killed for consumption.

In that camels lived in close proximity to humans, they occupied a conceptual and physical space similar to their dogs. People formed strong bonds with them, attributing human qualities such as emotion to them (see also Fache this volume). Like dogs, they gave personal names to them. Although people no longer use camels for transport, they sometimes adopt baby camels and raise them until they reach adolescence, when they become cantankerous and are taken out bush. People who have had close relationships with camels do not like them killed for meat and feel sympathy for them. As one man told me: "I feel sorry … when I see its face. I remember when I was riding, sitting on that camel". And as another man commented: "I don't like the idea of eating camels for meat because I grew up with them. They are [like] part of the family.… They carted everything" (Vaarzon-Morel 2008:8). The following examples also demonstrate that people treated their camels not as objects but as subjective beings: "Camels really understand people, like a dog. Camel and human being understand one another. Camel knows its owner" (Vaarzon-Morel 2008: 107). "Camels have a memory like a human being. If you get cheeky he'll remember you and go for you" (Vaarzon-Morel 2008:55). Similar to dogs, some owners viewed their camels as protectors, in that they warned them of strangers. As one man commented: "They are really good when you are travelling. They see things miles away and they tell you … like *kurdaitcha* [malevolent being] following you" (Vaarzon-Morel 2008:20).

As the examples indicate, affective ties with camels were based on shared experiences, co-dwelling, labor and concern—qualities that Myers notes for Pintupi (1986:110) ground human social relationships. Furthermore, today, many people regard camels as "belonging" to country (see also Rose 1995), because the animals were born and grew up on the land. This sentiment was particularly notable among Aṉangu, who had close relationships with camels in the past and for whom being born on country is a pathway to gaining rights in the country.

Yet camels are not regarded as part of the Dreaming and people do not have consubstantial relations with them. Nor, with one reported exception, have camels been incorporated into traditional ceremonies, as happened with buffalo in parts of Arnhem Land and elsewhere[9] (see Altman 1982; Trigger 2008). While maintaining traditional beliefs and practices, many people also identify as Christian. As I have described elsewhere (Vaarzon-Morel 2012), older people were introduced to Christianity by missionaries who taught Bible stories, including that of the Three Wise Men, who followed the star to Bethlehem on camels.[10] At Ernabella Mission, Aṉangu performed Christmas pageants in which they dressed as the Three Wise Men and rode camels, thus reinforcing this link between camels and Christianity (Vaarzon-Morel 2012). As a result of this history, many people symbolically associate camels with Christianity, and the cosmological significance of camels has shifted for them.[11] As Peipai explained, "Camels were the number one, it was they who followed the star. It is because of this that we hold camels in such high regard".

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[9] They arrived a century before camels were introduced to central Australia. The exception I refer to was noted by Glowsczewski (1991:14) who, in 1984, was told about an earlier event in which Warlpiri performed a camel "*danse des bosses et des os*" ("bump and bones" dance).

[10] See Schwartz and Dussart 2010 for an overview of Christianity among Aborigines.

[11] Similarly, as Fache also notes in this volume, donkeys are associated with Christianity. In central Australia people interpret the cross on their back as signifying this connection.

Furthermore, because some people conceptualize the relationship between Christianity and Aboriginal religion in hierarchical terms, stating that God made the Dreaming beings and other animals such as camels and donkeys, they feel that these animals are equally worthy and should not be treated as Other. The positing of certain introduced and totemic species as level—at least in relational terms—serves to foster co-existence. This resonates with the way that totemic species "that are forced to enter into contact are all positioned at the same ontological level" (Descola 2014a: 399).

This leads me to consider attitudes toward the hunting and killing of native animals as they influence attitudes toward camels. Today, Warlpiri and Anangu no longer live by hunting and gathering, but they hunt animals to eat when the opportunity arises. Although they objectify game animals to the extent that they classify them as "meat" and do not have personal, social relations with them, Anangu may nevertheless approach animals as responsive beings. To take some examples. Children are told not to tease sleepy lizards (*kalta*) lest they become ill. According to Eileen Wingfield and Emily Austin (2008:20), Anangu coax echidnas to unroll themselves by promising to kill their head lice if they poke their heads out. Similarly they note that carpet snakes and goannas "lie still for you to knock him in the head too. [Because] he knows he's been caught by people that eat him … Poor thing!" (Wingfield and Austin 2008:18). As I observed with Anangu who had cornered a perentie *(Varanus giganteus)* which assumed an upright pose, they called out a ritual invocation to get him to lie down. The same invocation is used by Anangu to alert people to the passage of a novice *en route* to initiation so that they bow their heads. According to Wingfield and Austin (2008:26), when the goanna hears this call "he shows respect and gets down, lies down flat and you walk up and kill him there". Although the latter examples involve deception, as Yengoyan observed, deception is based "in the moral givens of myth [and] is tolerable and socially accepted" (1993:243).[12]

Although Warlpiri do not respond to animals in the way previously described for Anangu, both Warlpiri and Anangu emphasize that game animals must be respected and that there are serious consequences for not doing so (cf. Descola 2014b). The killing, distribution and cooking of native animals is circumscribed by prohibitions and protocols, which derive from Aboriginal religious law.[13] While these do not apply to introduced animals such as camels, moral assumptions derived from them inform "proper" practices of killing animals, regardless of whether the animals are autochthonous or not. Thus, animals should not be killed wantonly;[14] to do so is to transgress Aboriginal Law. While successful hunters are admired and people take pride in being plentiful providers of meat, the numbers of animals killed should not be more than people can utilize. To illustrate, the late Japangardi Poulson, an admired hunter, told me about an occasion when he chastised a younger man who shot several kangaroos and took only the tails, leaving the "skinny ones" to rot. Japangardi admonished him: "You can't do that. You are wasting for the future

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[12] Ingold argued that the capacity for reciprocal exchanges between humans and animals is a feature that distinguishes animist hunter-gatherers from pastoral herders whose relationship with animals is "founded on a principle not of trust but of domination" (2000:72). However, Nadasdy points out that reciprocity can also involve deception, as occurs with northern American animists who conceptualize animals as "persons who give themselves to hunters" (2007:25). While my example concerning carpet snakes and goannas is suggestive of the latter, the relationship is on a species, not individual, level and, hence, very different.

[13] As is well known, there are taboos on people eating animals associated with their personal totem, although this varies among groups and according to context.

[14] As Ingold (2006:67) notes, an aversion to wasting animals is common among hunter-gatherers.

... That's against the Law.… we respect animals; that's Jukurrpa" (Vaarzon-Morel 2008: 61). Furthermore, Japangardi stressed that hunters should be selective in the animals they chose, leaving thin animals, "breeders",[15] and old animals.

Here it is important to recall that people share the spirits of Dreaming ancestors with the native animals they hunt,[16] and that they are compelled by Aboriginal Law to respect the animals (see also Thomsen and Davies 2007). Thus, for example, Peipai explained how the ill treatment of certain animals might result in repercussions for their ancestral country and vice-versa. Pointing out that animals have bodies and spirits just as humans do, she stated: "Any damage done to land affects their children and causes them to become sick and to die, because they hold the spirit of the land inside of them". Furthermore, she observed, the wanton killing of animals could result in the deaths of people who share the Dreaming spirit of the animal. Peipai's observations illustrate the relational nature of Aboriginal ontology and the importance placed on respectful social relations among humans and non-human entities for environmental well-being. Debbie Rose (1999) has described this phenomenon as an "ethic of connection" and emphasizes that it involves both *respect* and *restraint* with regard to animals. As I show later, this ethic extends to the treatment of camels.

**The contemporary situation**

Since the 1970s, when Aborigines ceased using camels for transport, dramatic changes have occurred in people's lives with the shift in government policy from assimilation to self-determination, and the recognition of Aboriginal land rights. The outstation movements in the 1970s and 1980s saw many people return to their homelands from government settlements. Although the process of decentralization has reversed somewhat, some homelands expanded to become large villages. Since the introduction of the *Native Title Act 1993*, Aboriginal people's rights and interests in land have been recognized over substantial areas of land.

In the past few decades the camel situation has also changed—as has the nature of people's engagements with camels. Although most people no longer closely associate with camels, encounters with free-ranging camels have increased in concert with an increase in the population and distribution of the animals. Now distributed over 3.3 million square kilometers of the continent, camels are highest in density in central Australia, with twice as many on Aboriginal land in comparison to non-indigenous pastoral and conservation reserve land (McGregor et al. 2013). However, camels range across different land tenure boundaries and, in so doing, they entangle groups with differing nature–culture relations and concerns about the animals (Vaarzon-Morel and Edwards 2012).

In 2007 I was engaged by Desert Knowledge Cooperative Research Centre (DKCRC) to conduct stakeholder research in central Australia on Aboriginal perceptions of free-ranging camels for a multidisciplinary "feral" camel research project (Edwards et al. 2008). At the time, the camel population was estimated to be one million, and expected to double in nine years (Edwards et al. 2008). This figure was subsequently revised to 600,000 (McGregor et al. 2013:1–2, 58). Elsewhere I have described the methodology, aims and findings of my research (Vaarzon-Morel 2008, 2010), which involved a qualitative survey

[15] Michael Pickering described a similar selection process at work among Aborigines in northern Australia when hunting cattle and buffalo, and notes that "a degree of respect was given to older animals which were left unmolested" (1995:18).

[16] Contra John Knight (2012), the animals are not thought of as strangers.

in 25 Aboriginal settlements in the Northern Territory, Western Australia and South Australia and two in-depth case studies. In addition to people who had used camels for transport, I interviewed people with no such history and people who had hunted camels for meat. The research focused on people's awareness of the presence and impacts of free-ranging camels and attitudes towards their management. Here I summarize some key points, briefly noting contrasting perspectives of non-Indigenous stakeholders, whose views were presented in findings reported by other researchers in the project.

Unlike Aboriginal people (and reflecting a naturalist ontology), non-Indigenous pastoralists and conservation land managers categorized free-ranging camels as a feral, pest animal. While recognizing positive and negative impacts associated with the animals—pastoralists emphasized economic considerations, whereas conservation land managers emphasized natural and cultural considerations—both groups thought that they needed to be managed, preferably by culling (shooting-to-waste) and through commercial use (Zeng and Edwards 2010).

In contrast to the other stakeholders, Aboriginal people held views on free-ranging camels and their management that revealed intertwined socio-cultural and environmental dimensions, reflecting their nature–culture relations and historical associations with camels. At the same time, people's perspectives on free-ranging camels were not homogeneous. While they recognized negative and positive environmental impacts associated with the animals, people's views differed depending on factors such as the density of camels in a particular place, long-term familiarity with the place, and their historical relationship with camels. Many people in areas where the density of feral camels was high expressed concern that camels were causing significant harms to their country, whereas such concerns were limited in areas with few camels. As my interest in this paper is to explore the dilemmas facing people in this former situation, I now provide examples of perceived harms.

Camels were said to be "killing country" by depleting, fouling and degrading water places on which other beings depend, many of which are of sacred significance. People expressed concern that the desecration of these sites could cause the traditional owners to fall ill. Camels were said to be driving away kangaroos, reducing the availability of bush medicine and food plants, and stripping and displacing trees, many of which have sacred significance and provide shade for animals (Edwards et al. 2010). People were fearful of bull camels and avoided areas with camels when hunting and visiting country (Vaarzon-Morel 2008). Elders, especially, expressed concern about the effects of camels on country for future generations (Vaarzon-Morel and Edwards 2012). In some places camels had damaged material infrastructure including taps, air conditioners and fences and were involved in vehicle accidents. Worried about the increasing numbers of camels and associated harms caused to the environment, many people expressed a need to manage the animals. Such views contrasted with earlier findings from studies Robert Nugent (1988) and Bruce Rose (1995) undertook in the southern part of the NT that, in general, Aboriginal people were not concerned about the effects of free-ranging camels on their land and that many people regarded camels as "belonging to country". Rose, a scientist, argued that: "people see the contemporary ecosystem as an integrated whole so they don't see some species as belonging while others do not" (1995:xx). In framing people's views in terms of "ecosystem" thinking, he imputes a naturalism that was alien to Aboriginal ontology (see Descola 2014a:197–198). Nonetheless, the implication is that, at one level at least,

introduced animals were incorporated into people's relational schema. Significantly, camel numbers were low in most areas that Nugent and Rose studied during the 1980s and 1990s respectively (see Vaarzon-Morel 2010). Clearly, the recent shift in people's perspectives is associated with the growth of the camel population. In reflecting on harms caused by camels, some people reasoned that camels behaved transgressively because, unlike totemic animals, they have no Dreaming and hence no law, or are outsiders, like orphans, wandering around creating trouble (Vaarzon-Morel 2012:68).

Nevertheless, despite some people positioning camels as outsiders, their relational ontology influenced their views as to how the camel situation should be managed. For the most part, people wanted camels to be reduced in number but not eradicated from their country, and live removal was the preferred option. Many people identified potential opportunities associated with the capture and sale of live animals, tourism activities and also hunting of the animals for pet and human consumption. Importantly, there was substantial opposition to culling on Aboriginal land, which many people perceived as "cruel" and wasteful (Vaarzon-Morel 2008; see also Fache this volume).

The logic underlying this position relates to a cultural ethic against mass killing and the wasting of animals, which as discussed earlier derives from Aboriginal morality and Law. Furthermore, in Aboriginal cosmology, mass death is associated with morally transgressive behavior and a lack of compassion and respect for others.[17] In Warlpiri mythology, acts of mass slaughter are commonly committed by monsters, who were once human persons but transformed as a result of ill treatment by relatives, on whom they subsequently seek revenge. As mentioned, Aboriginal people do not posit a radical division between nature and culture, and in their world of enmeshed relationships, mass death implicates human as well as other-than-human beings. According to the logic of Aboriginal relational ontology, killing for waste will attract cosmic retribution, with possible punishments including ill health, death and environmental repercussions such as drought. Although the primary focus of this paper is on people who used camels for transport, these sentiments concerning mass killing and wasting of animals are widely shared by people with little experience of camels (see also Fache this volume).

**Camel management**

Since my research, different strategies to manage camel impacts have been implemented in central Australia, including on Aboriginal lands. I have had no involvement in these developments, on which I now reflect. The DKCRC study (see Edwards et al. 2008), of which my research constituted a small but significant part, resulted in increased recognition of the negative impacts of camels in central Australia. In 2010 the Australian Government provided funds to implement the "cross-jurisdictional camel management framework to manage the impacts of camels across Australia" (see McGregor et al. 2013) under the "Caring for Our Country" program[18]. The Australian Feral Camel Management Project (AFCMP) was contracted to reduce camel numbers according to a suggested "feral" camel target density (see McGregor et al. 2013). The AFCMP was a collaborative partnership involving the national, state and territory governments, representatives from regional Natural Resource Management (NRM) agencies,

[17] See Scott (this volume) for a discussion of the Cree ethic of respect for living beings that inhabit their world.
[18] See Morphy (this volume) for background to the program.

commercial and animal welfare interests, local pastoralists and Aboriginal land Councils, ranger groups, and communities.

It is beyond the scope of this chapter to consider the negotiations that took place between Aboriginal landholders and the AFCMP. Suffice to say that Aboriginal landholders were invited to participate and that their informed consent was required (after lengthy consultations) before any activities were undertaken on their land (see McGregor et al. 2013). Nevertheless, despite people's preferred options, strategies for managing camel impacts were necessarily influenced by practical, economic and livelihood considerations. For example, in responding to the "invasion" of camels in their communities on the APY lands of South Australia, Anangu adopted a "no-shoot-to-leave" policy. For a time they were able to manage the situation by mustering the camels to watering points provided outside the communities (McGregor et al. 2013:19). However, as the camel numbers increased, this strategy proved ineffective. The transportation of camels to an abattoir for slaughter was then arranged as part of a commercial operation, which provided local people with employment and income. Approximately 15,000 camels were removed from the lands in this way (McGregor et. al. 2013:19–20). As this example illustrates, due to the vast numbers of camels on Aboriginal land, managing impacts inevitably meant removing camels from the land. However, in some regions the preferred option of live removal was not economically feasible and culling was implemented. This was the predicament Aboriginal people at Kaltukatjara faced in 2009, when, during a drought, camels entered their community in search of water. At one stage there were approximately 15 thousand camels circulating within 100 square kilometers of the settlement and thousands more beyond that range. Worried by this event, and tired of the damage the camels were doing to their country and settlement infrastructure, local traditional owners agreed to the camels being herded away from the community by helicopter and culled. These cases highlight people's responses when camels are experienced as highly invasive.

What I want to focus on now is the wider biopolitical context surrounding the implementation of the camel management project in less extreme situations. As Baker et al. have noted (2001), the development of a sustainable development paradigm in Australia has seen increasing recognition of the value of Indigenous ecological knowledge and the development of natural resource management projects involving Aborigines. In central Australia these projects are administered through representative Aboriginal bodies, such as the Central Land Council (CLC),[19] whose role has increasingly focused on environmental land management as large areas of land have come under Aboriginal ownership. At the same time, with the consent of traditional owners, thousands of square kilometers of inalienable Aboriginal Freehold land have become incorporated as Indigenous Protected Areas (IPAs), with associated Indigenous Ranger programs (Altman and Kerins 2012; see also Morphy this volume). The convergence of these events means that Aboriginal people in central Australia are increasingly engaging with the land in the context of Western bioconservation models (see also Fache this volume).

In many cases, environmental management plans have been developed for the IPAs that adopt a "two way" approach, which seeks to combine Indigenous and non-Indigenous knowledge (see, for example, Preuss and Dixon 2012; Fache this volume). Thus, in

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[19] The CLC was set up to give effect to the *Aboriginal Land Rights (Northern Territory) Act 1976* by organizing land claims and helping manage Aboriginal land.

addition to local understandings regarding free-ranging camels, people are introduced to Western scientific methods and considerations derived from broadscale scientific modeling which focuses on population aggregates (Strang 2008; cf. Scott this volume). Let me be clear here that people have asked for such information to assist them in looking after country (Vaarzon-Morel 2012:69). Yet, the fact remains that the language and practices of biodiversity conservation reflect radically different ontological understandings of nature–culture relations to those of Aboriginal people.[20] The following example from a research report on an IPA project illustrates the situation that results when economic constraints governing management options are added to the mix.

The report was co-authored by a Warlpiri ranger and a non-Indigenous land management officer. In it they describe an occasion when non-Indigenous staff familiar with "national biodiversity concerns regarding feral camels, shared their knowledge with *yapa* [Warlpiri] while they were cleaning camel bones out of rockholes together, visiting trampled soakages … or noticing camel impacts on bush foods and other vegetation" (Preuss and Dixon 2012:12). They then note that two years later the Warlpiri participants in the activities were identifying camels as a threat to "natural and cultural resources". Moreover, the authors note, these Warlpiri assisted with "negotiations and discrepancies" between conservation and "more traditional approaches to leave camels as they belonged to country" (Preuss and Dixon 2012:12). Although the preferred method for managing camels was live removal, it was uneconomical, so ground-based culling was implemented.

**Conclusion**

In his chapter "Histories of structures", Descola (2014a) describes how ontologies may transform through time by the replacement of one "relational schema" with another. He identifies changes in modes of treating others as one possible factor that can contribute to such transformation. Thus he notes "a mode of treating 'others' is superseded and another, previously marginal, acquires a dominant position; what has been considered normal now seems impossible and what has seemed unimaginable eventually becomes common sense" (Descola 2014a:365). In this chapter I have sketched how Aboriginal people's relations with camels changed over time as they became increasingly entangled with them. Initially treated as invading strangers, they then became a familiar animal in the landscape. Some people hunted camels for meat, thus continuing a traditional form of interaction with game animals. However, others adopted camels for use as transport and, in doing so, they developed yet another mode of relating to animals. But as I have shown, there were overlaps in the kind of relationship that people developed with camels and the relationship that they have with dogs. Importantly, the use of domesticated camels did not radically transform people's ontological relations with their world. More recently, many people's views on camels have changed due to increasing numbers of free-ranging camels and associated environmental harms. That camels are familiar beings and not invading strangers, however, creates moral dilemmas for people who, in wanting to manage perceived transgressive behavior, must choose which beings should live and which should die.

This moral dilemma involves questions of identity and cosmology. Much Aboriginal ritual is concerned with the life cycle and the reproduction of the world, both human and non-human. In the past, and to a much lesser extent in the present, ceremonies drawing on

[20] Knight suggests (2012:52) that hunting and modern forms of bioconservation control such as culling are not that different. However, as my analysis shows, people consider them very different.

ancestral powers in the land were performed to increase the different kinds of plants, animals and other entities on which Aborigines depended. As with indigenous peoples elsewhere (see Feit this volume), traditionally Aboriginal economy and cosmology were inextricably linked to vital concerns. And while death is accepted as part of the normal course of things, the power to take human life (to punish transgressions, for example) was bound up with social considerations structured by Jukurrpa or the "Law". Similarly, the taking of animal life whilst hunting was governed by prohibitions connected to Jukurrpa Law. Although the subsistence economy has changed, Aboriginal cosmological beliefs and teachings continue to frame their relations with the various non-humans inhabiting their world.

In maintaining proper relationships with the land today, however, Aboriginal people are faced with quandaries involving questions of life, death and identity, as shifts occur in their relations with camels and as they increasingly engage with radically different "forms of knowledge, regimes of authority and practices of intervention" (Rabinow and Rose 2006:197). The case of camels demonstrates that the inclusiveness that characterized Aboriginal relations with other beings in the past is now contingent, and increasingly being governed by a politics of exclusion, which involves a different way of treating others. This new biopolitical order is premised on the control and mass death of one kind of animal in order for others to live. What once seemed unimaginable is now accepted. At stake in this process are not only material and symbolic matters but the nature of people's subjectivities and their relational ontology. To conclude, the camel case illustrates the ongoing, complex and dialectical nature of Indigenous entanglements with Australian settler society, the land and introduced animals who inhabit it. In this chapter I have shown how differing facets of people's "ontological schemas" are highlighted, articulated and potentially transformed in this process.

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