

# To Make Their Journey Back to Nature: Zoo Captivity and Post / Humanism.



Image 1: Aerial Apple Map of Adelaide Zoo (Apple 2019).

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## Thesis Declaration

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...20/12/19  
Date

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## **Abstract**

Humans detain Other species in zoos for various publicly stated reasons. In this way, zoo captives are entangled within human rationalities. The Adelaide Zoo's mission statement expresses utopian ideals of conservation and connection, which it aims to achieve through combating the dystopian realities of Other species extinction and human separation from nature. This binary is formulated through the western belief system of humanism, a dualistic rationality, which is used by the zoo to explain its purpose. In this dualism, humans are superior, in control, and progressing, while all Other matter/s are ranked, and compartmentalised, as lesser.

Based on fieldwork at the Adelaide Zoo from July 2011 to December 2013 my research examines the representations of zooing and claims of control and progress. To research western humanism, I employ four key theorists: Val Plumwood, an eco-feminist philosopher; Tim Ingold, a relational anthropologist (my categorisation); Karen Barad, a feminist physicist and Gregory Bateson an eco-anthropologist-scientist. These theorists utilise relational, connected systems to explain western miscalculations / conceptions about reality, that is, a posthuman perspective. I also draw on the work of a number of other pertinent scholars.

Western humanism organises zooing, but zoo-workers (paid and unpaid) demonstrated relational comprehensions about life at the zoo, for themselves and captives. The captives also demonstrated divergent becomings from those officially narrated. My Baradian intra-actions with captives, including Bears, Superb Lyrebirds, a Cassowary, South American Primates, Lions and Tigers, and one sonically-beautiful little brown bird, are all documented here. I attended the Adelaide Zoo as volunteer and ethnographer, enjoying the experience of observing hands-on keeping, and participating in volunteering. My research included observing, participating, interviewing and hanging out with people, as well as burrowing through the current and historical trails of official and unofficial narratives, within which the multi-non-linear connections between past, present, and hoped-for-future zooing, emerged.

The disparity between humanist and posthumanist perspectives is foundational to understanding zoo conservation efforts, and how people are entangled in zooing. A key

contention developed within the thesis is the tension between the representation/s of zooing and the experienced life emergences of zooing; that is, the possibility of performing zooing alternately. At the zoo, representations are utilised to explain zooing to the populace, where representations allow the appearance of movement, or change, in the stasis that is captivity. By reading each key theorist through my research, the mechanisms of western humanism clearly cohered into a perceivable, yet questionable, rationale. I argue that western dualistic essentialism, as a pathway to knowledge, has overshadowed, but not abolished, relational thinking, where connectivity and recursivity — that is *response ability* — better explains matter/s reality. In this thesis I articulate humanism to humanists, by making perceptible what often goes without thought, the normative values and beliefs of my culture, along with the mechanisms by which these are implicated in the processes and practices of zooing.

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Image 2: Adelaide Zoo Map Circa 2011 (ZoosSA)



## Prologue: *Big, pretty and easy to see*

The Adelaide Zoo's Australian Pelican exhibit is a generous, PVC-coated, wire-fenced enclosure near the central lawn: small children look through the wire-mesh, while above them, adults have an uninterrupted vista. The enclosure arcs round one side of a large, well frequented Rotunda, and is perennially gazed upon by the sculptured bust of a French sea captain. One volunteer guide offered that this exhibit “was a beautiful enclosure,” and I agreed, because although it isn't ostentatious in its presentation, neither is it intrusively enclosed, that is, so *obviously* created. This watery exhibit displays a sandy, white beach with small shrubbery and a large, shapely pond upon which the birds serenely glide. A small wooden 'jetty' protrudes into the pond and sometimes this hosts a pelican or two as well. In themselves the pelicans are eye catching — they have massive bills — and the enclosure is home to half a dozen *or more* at any one time, as not all the pelicans are captives — some are just visitors. Volunteers often refer to this 'moving' captivity when informing human-visitors about this exhibit. As nomads or 'vagrants' Australian Pelicans flying overhead can spy their conspecifics below, and drop in. The visitor-vagrants and zoo-captive pelicans are fed by the keepers when this occurs. Soon enough, the fly-ins fly off.



Image 3: An Australian Pelican looking through the exhibit fence.

That not all the pelicans are captives at the zoo astonished me when I first heard this narrative, and on passing on the information as a guide — which I invariably did — it

also elicited surprise from the human zoo-visitors receiving this news.<sup>1</sup> The volunteer tour notes helped in understanding why these birds are surveying the land below and their propensity for moving about. Australian Pelicans are nomadic residents of coastal *and* internal waterways of the continent, and they are able to “stay in the air gliding for up to 24 hours... and reach altitude of 3000 m” ( Wildlife Walkabout Tours: Section 5 ZoosSA 2011f, p. 22).



Image 4: Big...pretty and...easy to see: Australian Pelicans at the Adelaide Zoo

Being a local, I had noted these birds occasionally throughout my life. Such large creatures, way up high, overhead, moving towards parts unknown. Being coastal *and* internal occupants of this land mass means that Australian Pelicans take advantage of inland lakes that occasionally appear in South Australia due to rainfall in the Northern Territory and Queensland, many hundreds of kilometres (if not over a thousand kms) to the north-east and north-west of the salt lakes being flooded.<sup>2</sup> As seasonal rivers, the flow moves along usually dry river beds towards established dry-salt lakes, the largest of which is Lake Kati Thanda-Lake Eyre.<sup>3</sup> This occasional flow / flooding event means

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<sup>1</sup> The pelican enclosure ends Walkabout Tours: Walk five and is the meet up point for walk six, which is the last tour. These six tours are given twice a day, morning and afternoon, beginning at 10am and 1pm and finishing at 1pm and 4pm respectively— half an hour for each tour, and given by guide volunteers from various marked ‘start’ places. As a guide, I gave these tours on a rotational ad-hoc basis.

<sup>2</sup> The Bureau of Meteorology provides flood warnings for Australian Rivers. In South Australia they list the Warburton, Diamantina and Cooper Creek heights of river in metres, tendency of heights — steady, increasing, falling — and the date and time of these observations. (Floodland warning for the Inland Rivers SA 2019).

<sup>3</sup> Named in 1840 by Edward Eyre but now referred to as Kati Thanda-Lake Eyre. <https://www.britannica.com/place/Lake-Eyre> The indigenous Arabana people, who have native title rights, call it Kati Thanda.

many water species and Other life forms thrive in parts usually classified as dry-salt lakes. These lakes form part of the western *outback* desert narrative — bone dry and inhospitable until floodwaters arrive from ‘up north.’<sup>4</sup> It also means incoming tourists for the outback towns surrounding these spaces, and work for various tour operators who gear up for an influx of people from all over the world when the lakes retain water.

This juxtaposition of biospheric events — copious rain in the north, running hundreds of kilometres through the Australian interior, and pooling into lakes in the ‘centre’ together with life forms moving towards, and erupting around, the culminating lake formations — creates a convergence of energies from different sources, not many of which are human energies. This sometimes includes the activities of Australian Pelicans, dropping into the zoo for a stay and food, on a long-haul journey ‘up north.’

These events — the lakes filling up, the pelicans and Other life forms materialising, and the tourism surrounding this outback phenomena— are part of the pelican narrative. And when parts of this narrative are told, the zoo is able to tell other stories. For example, the zoo (as part of a research effort into Australian Pelicans) had made a remarkable and species-conserving insight into pelican behaviour that has been exported to ‘save’ other continents’ pelican species. It had been noted that siblicide occurs when a more developed pelican sibling kills less developed sibling/s during nesting.

By overfeeding the first chick, the instinct to kill its younger chick is removed. Research on stopping siblicide has been used overseas to help raise a number of surviving young in endangered sub-species of pelican. ( Wildlife Walkabout Tours: Section 5 ZoosSA 2011f, p. 22)

This was an insight and intervention that helped endangered offspring to survive: a local effort that aided a more-than-local species problem. This is conservation and education as the zoo attempts to situate it and is included in the guides’ tour notes as an example of the organisation conserving species.

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<sup>4</sup> The lakes partially fill up dependent upon where the rain falls in the north. Kati Thanda-Lake Eyre only fills up fully about twice a century but contains water sometimes twice a decade. <https://www.britannica.com/place/Lake-Eyre>



The human intervention is situated as progress — humans helping pelicans to survive — whereas the pelicans sourcing inland water flows and dropping into the zoo are interesting information to be told to zoo visitors.<sup>5</sup> The allotting of agency is unequal, and this came to interest me. The pelicans fit “the big, the pretty, and the easy to see category” (Osborne 2013),<sup>6</sup> which explains why many Other life forms are not on human ‘radar.’ *Big pretty and easy to see* animals attract attention, as explained by the zoo’s CEO at one volunteer meeting.

As the Society’s ‘new’ CEO, she complained that people enquired about elephants ‘all the time,’ and also that she disliked having to respond that the organisation did not curate any elephants. Volunteer guides also spoke about zoo-visitors asking *where are the elephants?* One guide said he responded with, “dead and buried at Monarto.”<sup>7</sup> When people think of zoos, they think of life forms that are *big, pretty, and easy to see*. Other life forms are ranked lower and therefore not inquired after, or at least, not inquired about first.

I wondered if this was true, and how the ranking was maintained, agreed upon, or made normative. What else was ranked, and was there any correspondence between captivity and other rankings? This merged for me with the pelican drop-ins as being only ‘interesting,’ without being acknowledged as choosing, or having, agency. The size of the Australian continent and the flight to the inland lakes basin *when* it is filling up, makes the pelican navigation knowledge impressive. These convergences — around ranking, agency, absences in storylines and the awkwardness of inconsistencies — made me think about how zoo animals’ lives emerge, and the narratives about them.

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<sup>5</sup> The matter of water flow and its pooling, the dry riverbeds standing empty years on end but remaining contoured for the flows — all these ‘matters’ of agentic possibilities in non-life matter unfolding and becoming — these too are absent from reports of these occurrences. The prospect of scales beyond our reasoning, or even within it but unimaginably Other are absented, however, “it becomes important to locate the timeframe of human activity within the deep time of planetary history” (Irvine 2014, p. 157).

<sup>6</sup> Osborne (2013) examined the “life cycle, economics and future of... Japanese freshwater eels” including the enormous distances travelled by this species in their lifetimes. He also investigated their entanglement with various human practices which are diminishing eel populations.

<sup>7</sup> Monarto Zoo is an open range zoo 70 kilometres from Adelaide but easily accessed via the freeway. It is part of the Royal Zoological Society of South Australia’s operations too. The zoo’s ‘last’ elephant, Samorn, spent her final years there and is buried on site, after many years of ‘working’ at Adelaide Zoo.

## **Introduction: *Counting matter/s***

Some of them were dreamers  
And some of them were fools  
Who were making plans and thinking of the future  
With the energy of the innocent  
They were gathering the tools  
They would need **to make their journey back to nature.**  
(Browne 1974 my emphasis)

Humans detain other life forms in zoo-captivity for various publicly stated reasons. That is, Other life forms are entangled within explicitly stated, specific, human purposes. In the 2012 Annual Report, under the title ‘Our Mission,’ the organisation states, “Zoos SA is a charitable conservation society that exists to save species from extinction and connect people with nature” (ZoosSA 2012a, p. 4). I came to suspect these reasons for captivity as less than the whole story, and, with one of my favourite anthropologists in mind, I sought out avenues to help me understand what these misgivings were and how to research them. “It is well known that the most immediate insight into a society’s concepts can be derived from the reading of the utopian fiction developed in that society” (Steiner 1999a, p. 133).

The zoo’s mission statement articulates the utopian ideals of conservation and connection. To achieve this, it states the organisation will fight the dystopian realities of firstly, species extinction and secondly, our species’ disconnection from nature. I recognised these as dualisms, or binaries, where polarised opposites are used to clarify a position. At the zoo, the utopian fiction of conservation and connection are polarised opposites of the dystopian fiction of extinction and disconnection.

Further, I understood that what we presume to know becomes normative, that is, taken for granted. “*Every statement that anybody ever makes is made in answer to a question....*”

*Every question involves a presupposition* (Collingwood 1940, pp. 23 and 25, Original emphasis ). I began reading writers who interrogate the presuppositions of my culture, that is, western culture, and through doing this I began to consider *my* presuppositions. This led to my understanding of western culture's belief system as humanism:

...all living religions are part of daily life and their central tenets are accepted as truth that need no further verification. Humanism is one of the vital religions.... It is the dominant religion of our time, a part of the lives of nearly everyone in the 'developed' world and of all others who want to participate in a similar development.... the core of the religion of humanism [is].... irrational faith in our own limitless power.... a supreme faith in human reason — its ability to confront and solve the many problems that humans face, its ability to rearrange both the world of Nature and the affairs of men and women so that human life will prosper. (Ehrenfeld 1978, p. 3 and 5)

The “supreme faith in human reason” comes with a concomitant loss of emotional content from our ‘rational’ deliberations, and, as Steiner explains; “Logic is not the sole arbiter of ‘truth’ in *any* society” (Steiner in Adler & Fardon 1999, pp. 95, Original emphasis). Reason or rationality as the only source of the ‘real’ is questionable from this perspective. This severance of reason from emotion was in the past addressed by anthropologists:

It is the attempt to *separate* intellect from emotion that is monstrous, and I suggest that it is equally monstrous — and dangerous — to attempt to separate the external mind from the internal. Or to separate mind from body. (Bateson 1972, p. 470, Original emphasis)

Much has been written about western binary thinking, the cascades of separations — its compartmentalised ranking system — that originate from the nature / culture divide (Dolphijn & van der Tuin 2012; Hinton 2013; M'Closkey 2004; Wagner 2012). These cascades of ranks and rankings are ongoing and intensifying, and I examine this at the scale of ‘zooing,’ in this work. Various other theories attend to the realisation that our surrounds — the places and ‘things’ in / with which we become — are *unknown* surrounds to current westerns (Adamson 2018; Pfeiffer 2016). Still others explain a relational comprehension of reality, where we too are made of the same matter as our

surrounds (Coole 2013; Ferrando 2014). In accepting western ‘science’ and our knowledge base unquestioningly, we normatively think nature is everything *not* us and culture is everything concerning us.

There is a schism between dualistic-ranked thinking, which leads to a lack of understanding, or an unawareness of our surrounds, all while we are made of the same matter as those surrounds, and in this schism misunderstanding thrives. Our culture’s way of thinking with, “dualism is ... not so much ... a philosophical or linguistic problem as a misreading or idealisation of real processes of emergent materialization” (Coole 2013, p. 454). Westerns comprehend manipulating matter to create — things, inventions, *techne*<sup>8</sup> — but what emerges is always addressed on our presumption of being separate from all else, that is, disconnected from nature. *Not* assuming this changes perspectives:

What happens if nature is neither lacking nor primordial but rather a plenitude of cross-referenced convers(at)ions? Indeed, what if it is that same force field of diffracted articulations, technologies, and inventions whose argumentative frisson we call culture? (Kirby 2012, p. 204)

This perspective conjoins the nature / culture divide, as “natureculture” (Fuentes 2010, p. 600; Haraway, Donna 2008, pp. 387-388). Natureculture is a way of comprehending our species as part of all, where the *relational* processes at play encompass us and *more* than us. Moreover, from this perspective, “species are simultaneously actors and participants in sharing and shaping mutual ecologies” (Fuentes 2010, p. 600). As part of nature, our shared mutual ecology, what we categorise as culture is but another aspect of how nature — or reality — *becomes*:

...posthumanism can be perceived as a path of knowledge, which may eventually turn into full awareness: we literally are what we eat, what we think, what we breathe, what and who we connect to. (Ferrando 2014, p. 171)

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<sup>8</sup> *Techne* here is taken as the manipulation of matter either in its physical or theoretical form. I interpret western *techne* as understanding we *invent* through our manipulations of matter, when what we are doing is *discovering* how matter has alternate ways of becoming. Tesla (2011) referred to this distinction when speaking about his work. See also Campbell, O’Driscoll and Saren (2010); Ellul (1964); Fischer (2007); Grove (2017); Wills (2011) for various interpretations. Also, the word appears as *techné*, *technē* and plain *techne*. I have chosen the last spelling for simplicity.

The wider consequences of human interventions in matter/s needs this perception of our place in the universe, that is, that we are matter like all else. So, too, our interventions in or manipulations of matter, require us to comprehend the vastness of our non-knowledge and the implications for this biosphere of this lack on our part (Wills 2011). Therefore, I believe our discipline requires this additional relationality-of-all-matter comprehension, too.

### **Anthropology's human and posthuman divide**

Delving into parts unknown has been attempted within anthropology, where more matters require examination (or measurement, or calculation) than 'just' human matters (Helmreich 2011; Kirksey & Helmreich 2010; Russell 2010; Willis 2005). Dawdy (2010) for example, argues that we need to include, and research, the purposeful and discarded matters of enlightenment's interventions / manipulations, and questions the presupposition, "that human knowledge was progressing and that knowledge would improve the world" (Dawdy 2010, p. 764). She includes not only the successes, as they emerge from our manipulations, but their time-journeys through use / disuse to reveal how our products / commodities / things / inventions are, "not only made but also erased, commemorated, lived in, commodified, and re-cycled [and] can tell us at least as much about society as the processes that created the original edifices" (Dawdy 2010, p. 772).

So too, Tim Ingold (2007, 2011a) and Daniel Miller (2007, 2012), engaged in years of argument over the incorporation of more matter into anthropology's remit. Miller (2007) argued that human manipulated-matter was no longer 'natural' matter, believing our invented / created / manufactured materials are, "artefacts far removed from any claim to be natural substances" (Miller 2007, p. 26). He refers to Ingold's material stance as situated in, "a natural, not a human, environment" (Miller 2007, p. 27). Ingold had argued, "why should the material world include only *either* things encountered *in situ*, within the landscape, *or* things already transformed by human activity, into artefacts?" (Ingold 2007, p. 4, Original emphasis). Ingold perceived limitations of arguments like Miller's (2007) as a dualism of separation, where human manipulations are regarded as *not* natural, and which also alerts us to our 'exceptional' *cultural* ranking.

Five years later, however, Miller (2012) argued for including some of capitalism's interventions / manipulations of matter into anthropology's remit, because these interventions / manipulations were, he assessed, altering the 'natural' world. That is, he wanted to include measurements of, "pernicious substances and practices.... [so that the] science of climate change could lead much more directly to regulation, often at the point of production, that bans the most problematic culprits" (Miller 2012, p. 185). The culprits, in Miller's view, being the manipulators of 'natural' matter, who were harming the planet's biosphere with their interventions.

For Ingold (2011a), the matter being manipulated has always had some bearing on the outcome, especially when those doing the manipulating do not know all of the manipulated-matter's possibilities / potentialities. For example, mercury, lead, asbestos and now plastics, have, over recent human history, spectacularly performed unknown functions in their manipulation, and would presumably be high on Miller's (2012) regulatory metric agenda. Counter to his fellow anthropologists' isolation of matter from humans, where this absence-of-knowledge rises up to offer its unknown attributes, Ingold argues, "human social life is not cut out on a separate plane from the rest of nature but is part and parcel of what is going on throughout the organic world" (2011a, p. 8). As an ontological statement Ingold (2011a) goes further, relating back to the discipline's, and for my argument, Miller's (2007, 2012) restrictive understanding of matter.

The abstract concept of materiality, I argue, has actually hindered the proper understanding of materials. We would learn more by engaging directly with the materials themselves, following what happens to them as they circulate, mix with one another, solidify and dissolve in the formation of more or less enduring things. We discover, then, that materials are active. (Ingold 2011a, p. 16)

It is at this point where physics and anthropology intersect because the notion of 'active materials' is a quantum physics argument. "Matter is not immutable or passive.... It does not require the mark of an external force like culture or history to complete it" (Barad 2007, p. 151). That is, matter has "agential realism" (Barad 2007, p. 152) in that in reality, all matter has agency. "Matter is produced and productive, generated and generative. Matter is agential, not a fixed property of things" (Barad 2007, p. 137). The point that matter, in all its forms, emerges with all other matter and is enmeshed in

relations with all matter, encompasses both the argument that humans are matter and that what we manipulate does not cease to emerge / evolve before, during or after manipulations. “Posthumanism... is not calibrated to the human; on the contrary, it is about taking issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among other creatures (both living and nonliving)” (Barad 2007, p. 136). This, too, is my posthuman stance. It is not the stance of humanists, and it is this difference in understanding that this thesis will address.

This difference or misunderstanding between humanist and posthumanist perspectives is foundational to understanding zoo conservation efforts, and how people are enmeshed in zoo-emergence and its attempts to reproduce itself. This perspective matters to anthropology because, as western thinkers, and therefore presupposing ourselves out of nature, we work within binary systems of ranking, and humanist normative values of control and progress. That is, anthropology presumes that space, time and matter are separate essences, and then ranks, categorises or counts these essences in levels of importance. For example, ‘things’ categorised as ‘pernicious substances’ or ‘resources’ alter the rank / categorisation / counting when it becomes apparent occlusions in our knowledge, and its applications, have occurred. Miller (2012), for instance, came to believe the pernicious substances now have a higher (or different) rank and should be ‘counted’ differently. It does not seem, however, that Miller (2012) has altered his thinking to a posthuman perspective where all matter has agency, or, as Ingold states, that “materials are active” (2011a, p.16).

Another anthropological example, which reveals the difference between posthuman and humanist perspectives, is Harries-Jones (2008). He examined how westerns attempted to include — that is ‘count’ — *more* matters than financial into their ‘eco’ thinking, by utilising Gregory Bateson’s ecological aesthetics (Harries-Jones 2008, p. 158). Bateson’s approach — where humans holistically use emotions and reasoning to assess their surrounds — is a superior attunement than logic alone (Harries-Jones 2008, p. 165). Harries-Jones (2008) examined how, in applying *only* rationality in their eco-thinking, North American National Parks forest management reduced the complexity and systemic recursivity of their forests down to manipulatable categories. Further, in so doing, they

treated park visitors' appreciations of parks within the same remit as forests' ongoing-life possibilities, that is, forest sustainability. Harries-Jones argues tree-lifetimes and human appreciations of forests' beauty are experiences of different 'time' emergence.

The gap between a human sense of time in the western world and ecological time-spans is one of the most potent uncertainties in ecological knowledge and a major source of difficulty in judging the severities of ecological events.... The problem (in the western industrial world at least) is that our own sense body time, and of the ecological, recursive time of organic structure, is bound together with clock time and clock time combined with a sense of individual control over events. (Harries-Jones 2008, p. 165)

Applying industrial clock-time thinking to eco-forest-time meant that people with different categorical thinking — for visitors 'beautiful parks' and for managers 'sustainable parks' — created a comprehension gap around conservation within the same park. For the forest managers, timber extraction meant access to a resource that would ensure the ongoing sustainability of the parks. Controlling forests meant scaling forest-time to human-time, and moreover, the *particular* human-time, of industrial-time. For visitors, logging trees was not a conservation value. Another way of articulating this is that the “anthropological challenge is to find ways of understanding the interrelationships between human and geological temporalities” (Irvine 2014, p. 170).<sup>9</sup>

What is of interest to me at the zoo is that this same 'gap' in our understandings of *spacetime* occurs about Other life forms' existences, where, “arbitrarily restricting the context of a problem in order to make it easier to solve renders the 'solution' worthless or even destructive” (Ehrenfeld 1978, p. 108). 'Industrial time', for example, restricts the context of time to human time, and moreover, to current market-world commercial time. The zoo runs on 'industrial time,' so how does this co-evolve with captivity? Harries-Jones (2008) argues the reduced contexts of western market-world manipulations make absent real outcomes.

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<sup>9</sup> Geology as “the science that deals with the dynamics and physical history of the earth, the rocks of which it is composed, and the physical, chemical, and biological changes that the earth has undergone or is undergoing.”  
<https://www.dictionary.com/browse/geology>



(T)he world's national accounting systems do not include either measures of resource depletion nor degradation of resources so that national accounts, supposedly the world wide indicator of human prosperity, do not give a true picture of their economic performance. (Harries-Jones 2008, p. 155)

So too, McLean (2009) diffracts human imaginings and materiality — story-telling as part of universal creativity — where ethnography too, becomes creative reality. He argues anthropology should include not only the objects that humans manufacture / create and consume, but all entangled matter/s.<sup>10</sup> That is, “a creativity immanent to the material substance of the universe and therefore not dependent on the human assignment of cultural meaning” (McLean 2009, p. 214).

Our presumption of human exceptionalism alters the values we employ to work out the primacy given to energies we expend. In order to explain to myself *why* capitalism reduces everything — including zooning — to extractable-resources, I needed to understand not only that this is generally assumed to be *how* it is, I needed to know the *mechanism* by which this occurred. To do this I found Gleeson-White (2011) and Marilyn Waring (1988).

### **Absent relations**

Gleeson-White (2011, 2014) explores how western civilisation absented many everyday relations with other matter – animate and inanimate – through the process of double entry bookkeeping (DEB). Furthermore, she marks how this relational lacuna creates our prime value of money, and through this, the processes and practices of money's becoming, that is, our economic system. Her narrative flows from Italy, in the 13<sup>th</sup> century, where, in an effort to track the value of manufactured goods and financial transactions, all matters not financial or of human manufacture were considered external and left out of bookkeepers ac/counting.

Up to this time, single entry bookkeeping / narration had included events and matters such as war, weather (droughts, floods, storms), geology (earthquakes, volcanoes, tectonic

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<sup>10</sup> For example, the packaging, and promotion, the transport, and vending, the use and misuse, the obsolescence or decomposition, recycling, burial in pits, burning or other abandonment, narratives about, histories of, complexities within are enfolded into the 'culture' of the material too. And this is just the human account/ability. It does not take into reckoning most of the matter that McLean wants included in ethnographic worlding, that is, the stuff, “beyond the field of human agency and subjectivity” (McLean 2009, p. 215).

shifts & tsunamis), personal relations of family, friends and villages (where harvesting was a group concern), and relationships with other animates. These matters were recorded, often, as a list or a narrative, and often included the responsiveness and emotions of the people experiencing all these work-at-hand conditions; people's *response abilities*. Over a couple of centuries 'bookkeeping,' as we comprehend it today, took hold and, in the 15<sup>th</sup> century, a Venetian named Luca Pacioli, tabulated, or codified, this system where, "double entry provided the means of discarding all information extraneous to decision-making leaving behind only numbers" (Gleeson-White 2011, p. 174). Nothing has been 'counted' as worthy of being entered into our 'capital' ledgers other than human manufactured / manipulated matter and money as this system became globally normalized. "Because accounting reduces everything to its monetary value, it has allowed us to value least that apparently free source of life itself: the planet" (Gleeson-White 2011, p. 8).

All other matter, including the world in general and its occupants are therefore excluded from our accounting and our responses. Further, when it is comprehended *how* some matter can become manipulated, so as to be included as capital, this is then categorised as a resource. As a resource this matter can then have a value extracted from it. Once we know how to extract the value from matter, that matter becomes the focus, of both extraction and the bookkeeping that accounts for it. This simple measuring methodology of 'accounting,' a quantification that includes and excludes, gradually entangled the world.

### **Absent values**

This world entanglement is relayed by Marilyn Waring (1988) in her examination of the inter/national uptake of double-entry bookkeeping. She argues the measuring tools used were implemented to justify the ends, and as such the outcomes are dubious (Waring 1988, pp. 48-9). The accounting system to gauge and document economic value globally, is the "United Nations System of National Accounts (UNSNA)" (Waring 1988, p.33). This falls short on so many levels that she asserts:

The UNSNA and its rules and regulations govern the measurement of national income in all countries. It is my confirmed belief that this system acts to sustain,

in the ideology of patriarchy, the universal enslavement of women and Mother Earth in their productive and reproductive activities. (Waring 1988, p. 33 and 47)

That is, as ‘value’ observations, these are subjective perceptions, chosen to support male conceptions and were began so as to work out how to pay for war (Waring 1988 pp.56, 57, 91). Waring’s focus was upon the work of women and the policed boundaries that kept their multitudinous labours out of the accounts of Gross Domestic and Gross National Productions, but she also pursues the exclusion of the relations with other matters of this planet. It is in these relations where the environment / biosphere and all it contains are absent from accounting tabulations, nationally and internationally. This means, “soil, water, and climate .... clean air to breathe.... are thought of as the free gifts of nature” (Waring 1988, pp. 250-251).

When these are taken-for-granted, that is, as non-respon-able-to, unaccountable non-resources, in the UNSNA, there are different outcomes within ecological relationships:

When nature reproduces itself in its own form, without intervention, and in a way that contributes to the well-being of the community, it is of no value. When nature produces a harvest, which can be processed for the market, it counts for something. When nature has a market value, destruction other than for the market gives rise to legal suit; when nature’s function is invisible and valueless, it can be destroyed at will. (Waring 1988, p. 251-2)

This valueless non-resource understanding and the concomitant accounting that values what is done — to the planet and the earth Others that emerge here — are an *absence* of relations and the values we should be invoking about them. This lacuna creates the situation, whereby, “nature and society are conceived as being external to the workings of commerce and ...[are] reflected in the way we — and profit-driven markets — value the world” (Gleeson-White 2014, p. xv).

In short, double entry bookkeeping, morphing to global economics, excludes the value of all other matter.<sup>11</sup> It is an *account* of valuation, not a *responsive* valuation. Further, as

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<sup>11</sup> Gleeson-White charts the attempts of modern accountants to rectify this loss of matter by re-integrating relations back into economic accounting in her 2014 book, *Six Capitals*, by “adding to accounting’s traditional focus on financial and manufactured capital. ... intellectual, human, social and relationship, and natural capital” (p. xx).

Bateson argues, this externalising the ecology (of which we are a part), has extended to the corporatisation process where “entities ...precisely *not* persons.... are self-maximizing entities” (1972, p. 452, Original emphasis). These are not isolated instances of these conclusions. Another example is Raymond Williams (2005), whose treatise on western perceptions of ‘nature’ argues that our complete connection with nature, coupled with our perception of superiority and control over it, has obscured the outcomes of this cultural strangeness. “We have to look at all our products and activities, good and bad, and to see the relationships between them which are our own real relationships” (Williams 2005, p. 84).

Looking at “singular forces” is not enough, according to Williams (2005, p. 84). He argues we have to comprehend multi-complexities, which, across untold and multiple scales, entangles us, and that if “we alienate the living processes of which we are a part, we end, though unequally, by alienating ourselves” (Williams 2005, p. 84). The products *and* by-products of our manipulations of matter have to be included, that is, what is needed in eco thinking of finance and environment, is “a more radically honest accounting” (Williams 2005, p. 84).

It will be ironic if one of the last forms of the separation between abstracted Man and abstracted Nature is an intellectual separation between economics and ecology. It will be a sign that we are beginning to think in some necessary ways when we can conceive these becoming, as they ought to become, a single discipline. (Williams 2005, p. 84)

This echoes Dawdy (2010), Gleeson-White (2011, 2014) and Waring (1988) in their revelations about the absences, those in our manipulations of all matter/s and in our inter/national ‘accounting’ where our manipulations of matter are only partially ‘counted’ so as to make ‘free’ the ‘natural’ resources being manipulated / altered / commodified.

Working within non-human corporate behemoths provides little self-corrective processes to limit / guide / or make wise these entities (paraphrasing Bateson 1972, p. 452). Other life forms, and the non-resource world in general are thus invisible, and anything done to them is unaccounted for in any meaningful way in western thinking. Tsing (2014) argues

the reductionist generalisations of economics colonised western thinking, reducing knowledge and its applications and, thus, extending to anthropology as well:

In neo-classical economics, individuals are self-contained maximizers with simple relations of competition with others. Social relations are reduced to costs and benefits.... the simplifications have been very powerful, establishing the hegemony of this science [economics] over all other science of the human.... Anthropology grew up in the shadow of utilitarian individualism. Because of the latter's power, we have been fighting to enrich the domain of the social throughout the history of our discipline. (Tsing 2014, p. 40)

Tsing (2012) also discusses the mechanisms of reductive thinking in its applications, whereby earth Others are “precision” engineered into scalable resources and thus made financially exploitable, with — sometimes, but not always — concomitant, albeit different, spacetime-mattering devastations (p. 524).

In sum, as reductive rankings, western accounting has further compartmentalised humans from all Other matter/s, which is a serious problem when we rely on Other matter to provide ongoing biospheric conditions: that is to be responsive to us. At the zoo, I often noted the default to commercial / economic / resource values that trumped the stated aims of conservation. To explore these absences of relations and the values that emerge from western thinking I use the relational theory of posthumanism.

### **A different way of thinking**

What we need... is a quite different way of thinking about organisms and their environments. I call this ‘relational thinking’. It means treating the organism not as a discrete, pre-specified entity but as a particular locus of growth and development within a continuous field of relationships. (Ingold 2004, p. 219)

Posthuman theory emerged as a way to explore my fieldwork, through processes and practices emergent there, it provided an alternative perspective that presupposed humans *as* nature. Moreover, people who questioned humanism gave advice on how to research it. “Feedback and analysis are the tools of humanism, and it is on humanism that they must now be used” (Ehrenfeld 1978, p. 19).

Thus, a journey to explore my own cultural understandings took me on many excursions, but I have settled on four key theorists, who are relational thinkers. They are a diverse, yet strangely harmonious group who enveloped different perspectives yet suggested similar outcomes. For example, I argue Plumwood's perspective of *mutuality* (1993, p. 17), Ingold's *becomings* (Ingold 2011a, p. 9), Barad's *agential realism* (2007, p. 152), and Bateson's *holism* (Bateson & Bateson 2005, p. 181), are all worldings designed to incorporate more matter into our humancentric musings. These concepts are explained and developed within the data chapters where these theorists are utilised (see Arrangement of chapters below).

Plumwood was an eco-feminist; Barad is a feminist particle physicist; while Ingold and Bateson practice/d anthropology. Yet, all four comprehend the universe as an emergence of matter/s, where relations and / or connections *best* explain our reality rather than dualistic categorisations that separate, segregate, or compartmentalise life's emergences into individuals, things or beings.

So, too, all four theorists argue our dualistic misunderstanding of reality stems from *particular* western foundational thinking, and not *universal* human metaphysics. That is, not all of the world's peoples agree with western perspectives on reality. Basically, Plumwood (1993), Barad (2007), Ingold (2000, 2011a) and Bateson (1972, 2002, 2005), agree upon an understanding where researching processes and practices explains reality better than researching any of the 'essences' — things or forms — that emerge from those processes and practices. Posthumanism is a *moving* understanding of how reality becomes (which presupposes no eye-in-the-sky or god-science positioning). Humanism requires *static* positioning (which presupposes human overview from which to observe). I employ these four theorists — who, through becoming entangled with a different foundational presupposition emerge as posthumanists and whom I 'classify' as posthumanists — in an analysis of the zoo's humanist presumptions.

*Their* presuppositions or the measuring apparatus (as Barad (2007) articulates below) coalesce around anti-humanist beliefs but they explain western 'humanist' culture from different perspectives. They are, after all, western, which entails diverse disciplinary,

often siloed, academic knowledges. Presupposing has consequences and Bateson (2002) explicitly warns against the absenting of this knowledge from our work:

Science, like art, religion, commerce, warfare, and even sleep, is based on *presuppositions*.... I have encountered a very strange gap in ... all levels of educations, among students ...humanists as well as scientists. Specifically, it is lack of knowledge of the presuppositions not only of science but also of everyday life ... presuppositions... are matters to be brought out into the open. (Bateson 2002, pp. 23, 24, Original emphasis)

Beginning with the particularity of western thought, Val Plumwood (1993) argues against a universal human misreading, and for a western misreading in particular, where, “it is the development in certain cultures, especially and originally western culture, of a particular concept and practice of human identity and relationship to nature which is the problem, not the state of being human as such” (Plumwood 1993, p. 12). Her interpretation of this separation, where humans are deemed external to all else that exists, goes back to “the exclusions present in the Platonic account of reason” (Plumwood 1993, p. 5).<sup>12</sup> Plumwood argues our western three-millennia-long misreading of reality requires reversal so as to realign our thinking relationally, thereby allowing us to affirm ‘nature’ (paraphrasing 1993, p. 5). For, “if we do not understand the development and the defects in the western story of reason and nature, we may remain trapped within it or settle for one of its new versions” (Plumwood 1993, p. 6).

Plumwood (1993) employs five features (or practices) — *backgrounding, radical exclusion, incorporation, instrumentalism and homogenisation* (Plumwood 1993, pp. 48-55, My emphasis) to unravel the interlocking mechanisms of the western “master” narrative where, “western culture ... has been deformed by its masculinisation.... it has evolved as hierarchical, aggressive and destructive of nature and of life, including human life” (Plumwood 1993, p. 30).

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<sup>12</sup> Her foundational beginning with the revered, ancient, Greeks goes deeper than other posthumanists who place the origins of western dualistic thinking squarely within the Enlightenment period (*c.f.* Bordo 1987; Sheldrake 1988). Plumwood asserts the longer timeframe removes the problems associated with atomism, and allows ‘reason’ to be examined, so that “nature is reconceived as capable of agency and intentionality, and human identity is reconceived in less polarised and disembodied ways” (Plumwood 1993, p. 5).

Ingold (2000, 2011a) resonated with posthuman perspectives to counter this hierarchical destructive deformation, as he situates us as the environment; we are not *in* nature, we *are* nature. Also, he comprehends that it is in wayfaring — movement — where lives emerge. That is, “wayfaring is the fundamental mode by which living beings inhabit the earth” (Ingold 2011a, p. 12). The west’s static comprehensions do not explain human or any other life, nor do they explain the universe — as Barad (2007) also argues. This upturns the structuring utilised to explain existence in a way that, first, creates a separation between us and all else, and second, segregates everything — humans and all else — into explainable, compartmentalised, ranked, objects.<sup>13</sup> Rather, we emerge in:

...a world of incessant movement and becoming, one that is never complete but continually under construction, woven from the countless lifelines of its manifold human and non-human constituents as they thread their ways through the tangle of relationships in which they are comprehensively enmeshed. (Ingold 2011a, p. 141)

In addition, coming to comprehend *keeping* as a collective, entangled endeavour, where agency emerges *between* matters — humans, captives or other matter/s — made understanding my field easier, blending my work as researcher and volunteer. And this correspondence / confluence of waves of movement-meaning is Barad’s diffraction in action (2007, p. 407).<sup>14</sup>

Karen Barad (2007) utilises the work of physicist Neils Bohr who helped formulate the basis of quantum physics in the early 20<sup>th</sup> Century.<sup>15</sup> Bohr upended the reality of, and superseded, Newtonian, classical, intuitive perception (Barad 2007, 19 and 110).<sup>16</sup>

What he [Bohr] is doing is calling into question an entire tradition in the history of Western metaphysics: the belief that the world is populated with individual things with their own independent sets of determinate properties. (Barad 2007, p. 19).

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<sup>13</sup> Anderson (1991) in his *Imagined communities* gives the example of Empire to Nation where the western compact privileged peoples based on borders figured upon (amongst many other matters, or measures) language and the techne of printing that language - which begets another static category requiring more categories of explanation - dictionaries, catalogues etc. Today, nations are another identity requiring more explanation and thus more categories.

<sup>14</sup> “(P)hysically speaking, diffraction and interference are one and the same; they both have to do with the fact that when waves overlap, their amplitudes combine” (Richard Feynman paraphrased in Barad 2007, p. 407).

<sup>15</sup> Along with Heisenberg, Einstein, Dirac, Pauli, Schrodinger, and Planck (as a few examples amongst many other physicists) (c.f. Rovelli 2016 (2014))

<sup>16</sup> This is a long exposition of Barad’s physics as she proved a hard ‘sell’ to anthropology, and her perspective requires articulation.



According to Barad, in the universe, and thus for me at the zoo, “(n)ature is neither a passive surface awaiting the mark of culture nor the end product of cultural performances” (2007, p. 183). She posits all matter has, “(a)gential realism...[where] the forces at work in the materialization of bodies are not only social and the bodies produced are not all human” (Barad 2007, p. 225).

Barad (2007) translates quantum physics into social science understandings. For example, the western presupposition of an observer independent reality is upturned. In quantum perspectives observer and observed are entangled in the experimenters’ metrics, thereby precluding the possibility of independence:

Barad’s aim is to highlight how the process of scientific measurement cannot be divorced from the physical environment it strives to apprehend. She shows how the famous double-slit experiment in quantum physics challenges the common assumption of language and cognition as representations of an observer-independent reality. Barad argues that this long-standing assumption fails to account for the quantum entanglement of observer and observed in the measurement process of scientific experimentation. (Chiew 2012, p. 46)

Barad’s (2007) work exposes the presuppositions social scientists have been relying on to speak about reality. That is, how western knowledge accretion, based upon the abstractions of reasoning, research, and representations, do not “measure” — independently from the measurer — the measured.

Bohr’s naturalist commitment to understanding both the nature of nature and the nature of science according to what our best scientific theories tell us led him to what he took to be the heart of the lesson of quantum physics: *we are a part of that nature that we seek to understand*. (Barad 2007, pp. 67, Original emphasis)

As matter of the universe, we are subject to the exigencies within which we emerge, as do all other matter/s, which means that measuring becomes problematic. Within quantum mechanical theorising there is a relation between measurers, measuring tools and measurement results that classical physics does not address. Barad (2007) reveals our metrics — how we measure and thus make comparisons — are inextricably linked to the outcomes we perceive. It matters which conditions, or apparatus, are utilised to obtain results because they are related in the phenomena that emerges:

Measurement practices are an ineliminable part of the results obtained.... Bohr situates practice within theory. As a result, method, measurement, description, interpretation, epistemology, and ontology are not separable considerations. (Barad 2007, p. 121)

In this thesis, the zoo is the scientific measuring apparatus of captivity,<sup>17</sup> where, “there is something fundamental about the nature of measurement interactions such that, given a particular measuring apparatus, certain properties *become determinate*, while others are specifically excluded” (Barad 2007, p. 19, Original emphasis).

Gregory Bateson (1972, 2002) echoes Plumwood, Ingold, and Barad, in comprehending our inclusivity *within* this universe. “We are not outside the ecology for which we plan — we are always and inevitably a part of it” (Bateson 1972, p. 512). He argues for an understanding of reality where we too are captured within the maelstrom of matter/s within which we attempt to make sense of it all. To understand requires holism — his “systemic wisdom” (Bateson 1972, p. 440) — that includes ‘recursivity’ — looping back, feed-in, carry-on effects of emerging in this universe across levels of spacetime matter.

Bateson also comprehends that western “conscious purpose” (1972, p. 440), which includes our complex techne and the power we think / know they afford us, are also enmeshed within this loop back, feed in, spacetime mattering. Furthermore, the limit, or partial knowledge of our understandings, means we cannot turn our perceptions away from this emerging reality, as the outcomes can be dire:

...the *myth* of power is... a very powerful myth and probably most people in this world more or less believe in it. It is a myth which, if everybody believes in it, becomes to that extent self-validating. But it is still epistemological lunacy and leads to various sorts of disaster.... It is clear now to many people that there are many catastrophic dangers which have grown out of the Occidental errors of epistemology. (Bateson 1972, pp. 494-5, Original emphasis)

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<sup>17</sup> I would like to thank Matt Barlow (PhD candidate University of Adelaide) for this insight.

All four theorists refer to the values being applied in our relationships with our surrounds where a western ranking means the devaluation of earth others. Braidotti (2013) asserts that we need posthuman perspectives because they show us the connections between matters rather than relying on understandings based around the essentials of matters. This is where posthuman perspectives allow us:

...to see the inter-*relation* human / animal as constitutive of the identity of *each*...  
This is the 'milieu' of the human / non-human continuum and it needs to be explored as an open experiment, not as a foregone moral conclusion about allegedly universal values or qualities. (Braidotti 2013, pp. 79-80, Original emphasis)

### **Manipulations matter**

Examining zooing through a posthuman lens, and understanding the reduced values westerns work with, where rank rules and is dependent upon human resource possibilities, my thesis question/s became: *How does humanism, as a western belief system, emerge in a zoo? What practices and processes emerge as western zooing? What is zooing?*

In this thesis I articulate humanism to humanists, by making perceptible what often goes without thought, the normative values and beliefs of my culture, along with the mechanisms by which these are implicated in the processes and practices of zooing. I examine claims of progress and peruse the metrics used to measure it, whilst looking for any absent / opaque regress. The polarisations – utopian / dystopian, progress / regress – come about through the rankings inherent within our dualistic system. Reality falls between rankings, for example, where something is conserved but at a cost – a cost *not* measured by western values – but in outcomes sometimes counterintuitive and surprising, sometimes not. Also, where agency so obviously emerges but is not counted — like the Australian Pelicans and their nomadic travails that lands them in a zoo. This then morphs into tour information, passed along with the conservation success made by humans for pelicans; *our* manipulations are, thus, (seemingly) legitimately conferred.

Also, just to underscore the point, the zoo is a microcosm of the wider culture of which I am a part. I understand that this focused attention (*my* conscious purpose) leaves out many of the relationships that sustain/ed the life forms therein. I enjoyed my journey

during fieldwork at the zoo, and now realise that it is the larger culture, western culture, *my* culture, which is under focus, not just this small city zoo.

### **Arrangement of Chapters**

I begin, in Chapter Two, by considering my fieldwork methodology of becoming a volunteer tour guide and a researcher. This also covers the volunteering I sometimes participated in, but more often observed. A brief explanation of my writing up choices, including how methodology and history entwined within the work, and a context of the field site, ends the chapter. In Chapter Three, I explore ‘zoo history’, and how, during fieldwork, past matters inform/ed those of the present. An exploration of western ‘collecting’ and its oddness follows, and then Adelaide Zoo’s acclimatising past to present, where significant people and their ongoing entanglements within the state and the zoo, are unpicked. This non-linear zoo narrative is about the utilised fluid representations of zooing and various un/expected outcomes that entangle my fieldwork methodology with the history of the place.

In Chapter Four, I unpack humanism, as encountered during fieldwork and writing up, using Plumwood’s five mechanisms (1993). Focusing upon official mediations, but also through my observations and interlocutor accounts, these mechanisms help clarify the zoo’s past-to-present humanist narrative on captive bears, which, like the two Giant Pandas exhibited during my time at the zoo, have always been considered a valuable zoo-attraction (Rix 1978, p. 184). An overarching comprehension of our culture as a *master narration* that sets the template for the zoo’s narrative dis/connections and quantifications is made, utilising Plumwood (1993).

In Chapter Five, Ingold (2000, 2011a), and his perspective of incessant movement as reality, was illuminating because containing and exhibiting — that is holding still — Other life forms is what a zoo *does*. Ingold asserts that stasis is not possible because, “life always, and inevitably, breaks through the bounds of the objective forms in which we have sought to contain it” (Ingold 2011a, p. 115). Wayfaring, movement and breaking through are explored, not as in escapes (although these occur, and one is documented in this chapter), but in the way life emerges in the place. Gibbons, Big Cats and Orangutans

(all 'human' categorisations) are some of the captives juxtaposed with my human interlocutors and my own observations and ruminations to achieve this exploration.

In Chapter Six, I diffract Barad's (2007) posthuman perspective through the representations of zoo-conservation measured against keeping, a metric that exposed differences in people's understanding of progress. In this chapter, I re-visit the zoo's bears and diffract older, official mediations through one another, revealing how representations are made to fit emergent lives. Then, I examine how different keepers utilise different measures to distinguish their own and other keepers work, where keeper's alternate metrics reveal ranks of progress and control. Finally, in considering how inter/national bureaucratic actions are linked to captive experiences, humanist thinking becomes traceable. These are the patterns — diffraction patterns — where differences experienced and observed, make perceivable what matters, how they matter and for whom (paraphrasing Barad 2007, p. 72).

In my penultimate Chapter Seven, Bateson's (1972, 2002, 2005) eco thinking is accessed so as to explain the recursivity of zooing across many scales of meaning. Movement is once again dominant, but this time within universal scales of meaning, and juxtaposed with outcomes for zoo occupants in presupposing, and applying stasis, to emergent lives. Chook the Superb Lyrebird, South American primates, keepers and keeping, move through this chapter, as systems of circuitry reproducing a zoo.

Finally, in Chapter Eight, a weighing up and winding down transpires. I found that zooing was presupposed on the superiority of our species and our ability to manipulate and control Other matter. Moreover, these manipulations were always emphasised as progress, until they were, so obviously, *not* progress. Then, silence, or distraction, or moving on, emerged. That is, representations which did not always resonate with my interlocutors were utilised, by management, to move the progress narrative forward. In my interlocutor's resistance to these narratives, and through perceiving zooing through my four key theorists' relational perspectives, the zoo's contradictions and paradoxes became crystalized demonstrations of western humanist thinking.

This thesis explores how representationalism allows movement in controlled categories of life: life that is always ranked lower than humans. At the zoo, earth Others are then re/presented as ambassadors, or pests, as iconic, or surplus to requirements — to name just a few of the representations examined here. I found that zooing, as scientific apparatus, utilises metrics which determine that captivity is always re/presented as humans controlling matter/s and progressing. That is, a humanist accounting of zooing emerged; what was surprising, and gratifying, was the responsibility and non-western relational thinking that sometimes emerged as well.

## *Fieldwork amongst the captives*

### **A beginning**

I began volunteer training at the suggestion of Zoos SA staff, who I came to think of as ‘my gatekeepers,’ while awaiting approval to do my research. To be a volunteer at the zoo requires membership of the Royal Zoological Society of South Australia (the Society hereafter) and so my partner, two offspring and myself all became members. This also aided me in reducing the cost of purchasing tours and going on them as a ‘visitor,’ as Society members get tour discounts. Volunteering, my gatekeepers offered, would give me a working knowledge of the zoo, its internal organisation and an embodied experience of the place and its environs, plus an introduction to the people who frequented this space. At the time, this ‘peopled’ perspective — where human agencies were all that mattered — did not jar my worldview. Eventually, posthumanism altered my perspectives on knowledge, organisation, experience, environs and the life forms entangled with me; the affordances of my life. But at this beginning, my focus was on fieldwork, and the responsibility of becoming a decent anthropologist and a competent zoo volunteer. My fieldwork began in July 2011 and continued for 30 months, ending in December 2013. I continued volunteering at the zoo until December 2014 in order to repay the organisation for their time and energy in training me. I also thoroughly enjoyed the volunteering experience, much to my surprise.

There were two meetings with zoo staff to set up my research, and after the initial meeting my notes read: *The zoo staff... raised the ‘animal ethics clearance’ requirement for all tertiary researchers at their site.* My human research ethics and animal research ethics clearances were obtained from the University of Adelaide ethics committees respectively, as the zoo had no internal mechanism for dealing with these matters. For animal ethics clearance I watched online videos and completed the online course and quiz, successfully acquiring the *Animal Ethics & Welfare Induction Certificate*.<sup>18</sup> The clearances were forwarded to the zoo.

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<sup>18</sup> Human Ethics Research Committee Number H-183-2011 and formal Animal Ethics Committee letter dated 09.09.11.

The Orientation and Basic Training (OBT) manual, handed out at the first general volunteer training session, states:

For the purpose of this document a Volunteer has been defined as: “an individual who chooses to engage in specified, unpaid activities while representing the Adelaide Zoo, for the benefit of the community, themselves and the Royal Zoological Society of SA Inc.” (ZoosSA 2011e, p. 4)

Later, it was admitted by these same gatekeepers, that this device of volunteering also sorts out genuine enquiries for study from numerous, but ultimately less resolute, research requests. This ‘volunteer stratagem’ works not least because of the commitment required in order to fulfil it. In my case, OBT took place over a weekend in July 2011 and consisted of 12 hours instruction over two days. This activity was for people applying to be volunteers for various activities in the zoo. Applicant trainees were given a general overview of all the volunteering activities at the zoo and information on occupational health and safety guidelines, as well as equal opportunity tuition and information.

The possible volunteering activities on offer included working at the Information Desk (giving general zoo information, handing out zoo maps and renting out zoo perambulators for children), the Children’s Zoo (helping clean-up, feed and present touchable captives to visitors), BEEZA (creating behavioural enrichment articles for captives), Cadaver Corps (reducing dead captives to skeletons and pelts for various Touch Tables), Pot-a-Zoo (gardening), Zoo Watch (quantifying captive behaviours in data-collectable form), Zoo Mobile (an outreach programme for schools, aged care facilities etc.), Zoo Youth (a once a month Saturday activity around the zoo, split between younger and older children), Off-Site Speaking (presenting zoo information to local clubs and associations at their premises), Food Store Tours, and Tour Guiding, which then could morph into After Hours tour guiding (tours for parties that have hired a venue at night, for example, for weddings, 21<sup>st</sup>, corporate events), and finally, paid for behind-the-scenes tours known as *Boileau* during my research period, named after the corporate sponsor for the tours.

Having chosen Tour Guiding as my volunteer activity, this training took place on Thursdays (between 9am-3pm) over eight consecutive weeks in Winter. During this instruction, trainee guides become conversant with the geography of the zoo, the animals

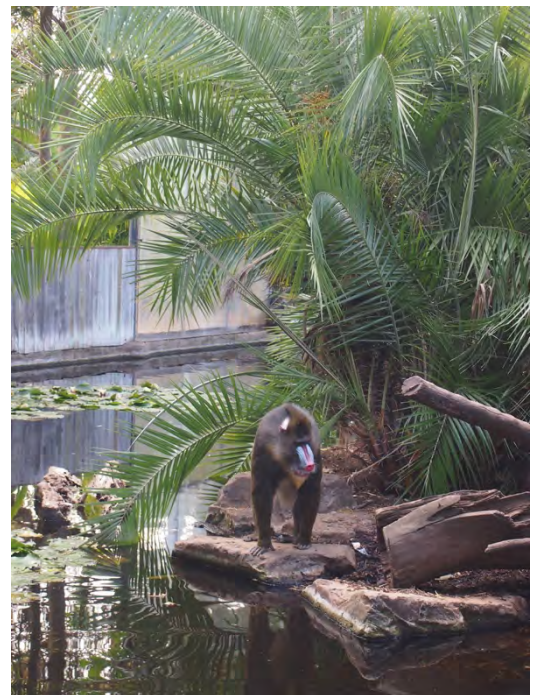


Image 5: Some of my two-minute talk captives

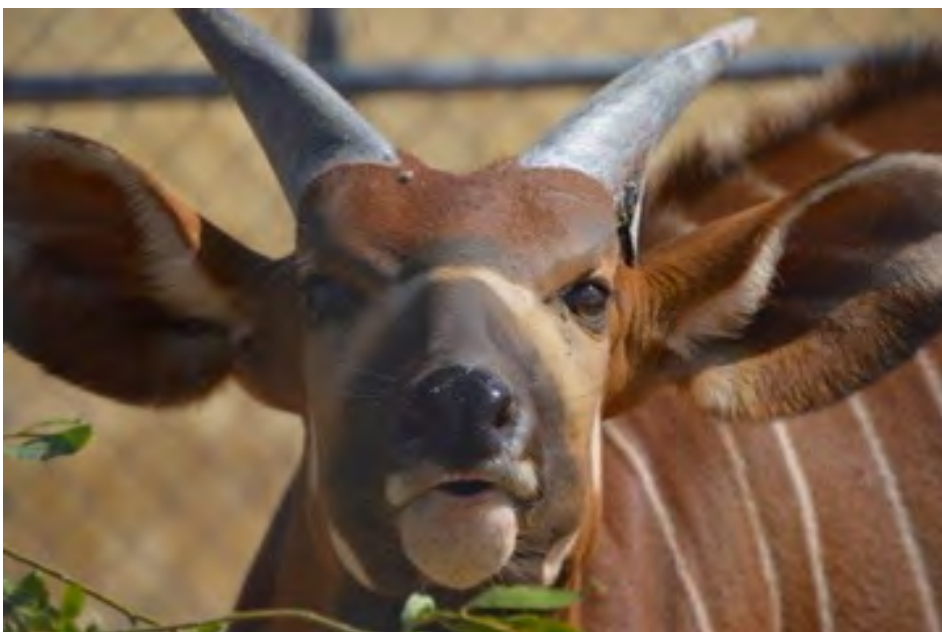


Black Palm cockatoo (Photo by ZoosSA)

Male Mandrill in front exhibit



Bongo at Monarto (Photo by ZoosSA 2013h)



on display, and the value and linguistics of conservancy. This knowledge is required to cohere, or organise, zoo narratives (Mullan & Marvin 1999)

Guide training also contained a short zoo history, weekly visits to exhibits that aided in learning the layout of the grounds, lectures on animal taxonomy including ‘endangered’ ratings, reproductive habits, and foods, amongst other species-specific knowledge. Trainees were required to give a weekly two-minute talk to the rest of the trainees and trainers on prearranged captives whilst standing in front of the exhibit housing the captive. My allotted species for these talks were the Black Palm Cockatoo, Australian Sea Lion, Mandrill, Carpet Python and the Bongo. When I was given this last captive, I thought it was a joke. My only knowledge about bongos was as a musical instrument!

The training also incorporated narratives of interest and uniqueness to this particular zoo and its inhabitants, including the ‘quirks’ of individual animals with which to enliven guided tours. These are encouraged in guide training because a personal animal story distinguishes tours and adds texture and depth to facts, categories, and statistics. Knowledge obtained personally is interestingly categorised by the volunteers. For example, some people accrete more of these stories than others and are therefore people who are recognised as being more experienced through the narratives in which they themselves were involved. These animal narratives are highly prized, and as such, are told and retold by the people involved and peripheral others who link to the narrative in the retelling with additional personal anecdotes. In this circulation, the lives of all the life forms and other matter (buildings etc.) have information potential and much is made from long ago incidents and occurrences. Officially, these can also be recited in various ways through the magazines and online sources that are utilised to promote the zoo, and which keep members and the general public informed. When this occurs an ‘our volunteers’ thematic is utilised to situate the unpaid help differentially from the paid, and a consciousness of belonging to a worthwhile group is attempted / inculcated.

At the end of the eight-week training a period, guides are then required to learn the six *Wildlife Walkabout Tours*. These tours were depicted as the heart of guiding as they incorporate most of the zoo captives. Over the next couple of months, I turned up at the zoo and found the volunteer guide on a particular tour that I was attempting to learn and

followed them around. Sometimes there would be zoo visitors in tow; sometimes it was just the guide and myself. After practising a few walks with a guide, they would ‘sign me off’ on my training checklist sheet. This was the official guide-training checklist, which included all six *Walkabout Tours* plus the *Touch Table* and *Panda Forest* talks. These are the categories within which guide volunteers work at the zoo and all of these ‘talks’ had to be signed off before an appraisal could be booked. When I had ‘mastered’ all of these half-hour talks, I put my name down for appraisal.

The assessment process, my ‘appraisal’, was given by long serving guides and took place on an appointed day. Nervously I ‘took’ two such guides around Walk Two and the Panda Forest at my allotted day / time and was (thankfully) successful in becoming a volunteer zoo guide. The same day, the issuing of an official Adelaide Zoo logoed volunteer ‘shirt’ signified my qualification for guiding, and I wore this with the rest of my purchased volunteer uniform of black or sand coloured pants, shorts or skirt, solid shoes, and a wide-brimmed hat, whenever I was on guide duty for the next few years. I also received my entry-to-the-zoo ‘swipe card’ that contained my name and a sweaty looking licence-like picture of me taken immediately upon appraisal completion. This card allowed entry, at various gates around the zoo, beyond the ‘open to the public’ zoo hours and was also required wearing at all times when on volunteer duty.

During the latter months of this training I received verbal approval, followed by written approval, for my Zoos SA Research Proposal. My first and most prevalent contacts were with volunteers, who must attend the zoo a minimum of one day’s work a month, possibly taken as two shifts. Many long serving volunteers do much more than the minimum however, and over the next few months my visits to the zoo attempted to cover all possible regular volunteer guide shifts. In this way I met a majority of the volunteers from various activities and many people who held down ‘two’ (or more) volunteer jobs. I signed up people from the Information Desk, BEEZA, Pot-a-Zoo, Zoo Youth, Zoo Mobile, Off-Site Speaking, After Hours and Food Store Tours. The Cadaver Corp and Zoo Watch volunteers were more difficult to pin down, but I was introduced to them eventually, and a plethora of anecdotes emerged. A few volunteers refused to sign a consent form but gave verbal permission to use their zoo narratives.

Volunteer training emphasised learning about the animals on site and their preservation in the zoo (*ex situ*) through breeding, and ‘out there’ in home-habitat (*in situ*) in conservation programmes. The ‘information’ imparted to trainee volunteers began with the success of ‘our’ volunteers, moved onto the geography of the zoo, the animals inside its boundary exhibit, and the schedules that obtained there. Much was made of being able to successfully impart ‘accurate’ knowledge to visitors. Here, success means reiterating Zoos SA provided information. It also is a ritual that layers an understanding of volunteering in the space and is part of the ‘our volunteer’ mantra, mentioned earlier.

For example, at the Annual General Meeting and monthly volunteer meetings, Society members are proudly told of the ‘500 volunteers with Zoos SA.’ This number is, at best, a list of names of people who are signed up for different volunteer programmes. However, the numbers who attend *consistently* fluctuates and, during fieldwork, I noted the same faces that repeatedly appeared, while rosters often looked like ‘help wanted’ columns. The other proudly and often announced volunteer statistic is that this organisation retains volunteers on average for ‘five years,’ where the median retainment for volunteers, in general, is only two years. Against this perspective, there are past and present ‘rumblings’ about the training and trainers, the retention of volunteers, the accuracy of knowledge being learnt and dispersed, and the commitment, by Zoos SA, towards volunteers in general. The upbeat messaging and the low rumblings were background to both my steep learning curve about, and enjoyment of, the people, the place, the captives, and the work.

### **Becoming a tour guide**

Towards my goal of meeting as many workers at the zoo as possible, it was proposed that I ‘pitch’ my research at the (regularly held) Volunteers Meeting early in 2012 at one of the zoo’s commercially available conference venues. There were approximately 70 volunteers in attendance, some keepers and administration staff. The Zoos SA CEO spoke at this meeting, as did various keepers and admin staff. During my allotted presentation time I explained Anthropology (not the simplest of tasks) and my particular research project. Afterwards a dozen people approached and asked for information and consent forms, most of which were filled in and returned.

A condition placed upon my research was that I wear my University's logoed top when researching. I attended the zoo in this apparel three to four times a week, sometimes changing into it before or after volunteering shifts, or turning up in my university logo gear to research for a few hours or an entire day. I once worked an early morning behind-the-scenes tour, did a follow up guide shift, changed into university gear, and stayed for the afternoon to interview and observe interlocutors, and then changed back into my volunteer uniform to conduct a night tour: a very long day indeed. After my volunteer shifts, I recorded my personal observations about my own volunteering. Interviews and round table discussions happened with fellow volunteers on and off site at various functions, from simple coffee breaks to funeral attendances, lunches and get-togethers after official events. Interviews with keepers were at their discretion entirely, but they also occurred on and offsite, sitting consuming food and moving around the zoo. This change of apparel meant, for example, that I was able to follow volunteers on their rostered shifts and also to speak to visitors, who interacted with the guides, with the possibility of inviting these people into my research. This, I thought, would be an effective way of meeting visitors and interacting with volunteers at the same time. This did not unfold as I had imagined, although it did happen a few times: my own reservations and timidity were largely at fault in this situation. This 'lack' of success motivated me to purchase behind-the-scenes tours and consume / observe them as a visitor (in my university gear) with various friends (eventually, including fellow volunteers) and family. However, I also noted that the attachment of visitors to a 'free guide' is a strange business and this too was entangled in the lack of success of this fieldwork endeavour. For example, many guides get annoyed at visitor attitudes, as happened one day in the Panda Forest, where a long serving guide was attempting to engage with a man who wanted to see a Panda in motion.

The visitor asked the guide, "why are they always asleep...been in a couple of times and they do nothing." The guide smiled and started on the Zoos SA standard Giant Panda story of '99% bamboo diet being less than nutritious' and the rest of Giant Panda narrative, all to no avail. The visitor remained 'grumpy' (my categorisation). The guide came over to me and whispered through the side of his mouth "You can't please some people. Animals cannot be turned on and off. They do what they want." The guide and I then spoke of the patience required to 'see' the animals doing different things, and just

being and living every day. The guide spoke of *how people really needed to stand for at least 10 minutes and just watch the captives*. The guide deemed it as a quite worthwhile endeavour in this space: the more patience, the better the results. I concurred, as volunteers do get to see quite a lot while being on duty. For example, watching keepers cleaning enclosures and feeding captives, all of which occurs right before you, in some exhibits. You get to ponder the captives in ways that ‘passing through’ never achieves.

Volunteers pass through *so often* that different things become visible and are gathered as knowledge through other senses. The sounds, smells, sensations and ways of perceiving alter with familiarisation. The zoo becomes a well-known affordance, and the general and everyday fade a little, so that the unusual and different are more noticeable. In the chapter *Captivity in the weave of the world*, Ingold (2011a) explains this sensation well:

Landscapes take on meanings and appearances in relation to people, and people develop skills, knowledge and identities in relation to the landscapes in which they find themselves. (Ingold 2011a, p. 129)

After my ‘pitch’ to the monthly Volunteer Meeting, a short synopsis of my research, along with my photo in Tour Guide uniform, was distributed via the volunteer e-newsletter. This greatly increased my profile at the zoo, and many emails and phone calls ensued because of this exposure. Some contacts requested more research information or asked for various commitments as a volunteer at the zoo. For example, one request came from the Night Walks coordinator — who was a volunteer, as were most of the coordinators for the different volunteering activities — asking if I would be interested in observing a Night Walk for a surprise birthday party, to which I agreed. Another request came from a guide volunteer asking if I could do a shift for her, to which I also agreed. After this in-house exposure, volunteers, met for the first time, greeted me as the ‘university student’ doing research at the zoo, and from this I surmised that there was an obvious robust readership of the e-newsletter.

Another opportunity occurred in early 2012 when I attended a promotion of Zoos SA at the National Baseball competition held at Norwood Oval. Zoos SA staff and volunteers set up a Touch Table of Pelts and skulls (usually displayed at Adelaide and Monarto Zoos) and invited the baseball crowd, comprising a wide demographic, to approach and

take a look at the exhibits. Later, three guides, myself included, were each allotted a piggy-bank Panda with which to wander the stadium and grounds seeking donations for the Zoo.<sup>19</sup> Mascot competitions between Zoos SA ‘Panda’ and Adelaide Shark ‘Bite,’ and various other entertainments, amid the actual baseball game, ensued. Numerous dignitaries were introduced to volunteers including one major Zoos SA sponsor. This offered a different perspective on how the general populace views the zoo. I also met the spouse and offspring of Zoos SA Chief Executive, as well as several staff and volunteers from Monarto and Warrawong sanctuary.

At this stage in the field I was meeting with ‘my volunteers’ (interlocutors) during their shifts at the zoo, from which there are copious field notes, but I had only managed one interview with a visitor. The staff were also a difficult demographic to ‘crack.’ I had, over the course of training and guiding, casually spoken to many keepers on duty with their animals. They often revealed the names of the animals they were feeding or cleaning up after, and some anecdotes about behaviour and such, usually ‘off-the-cuff’ stuff. I understood these were very busy people, which was apparent as they moved around the zoo on the public pathways in their work-a-day endeavours. Some were more gregarious about particular animals, and at that stage I was still awaiting making headway with keepers. This was also true of an elusive ‘librarian’ and library somewhere on the grounds that I had yet to encounter.

I enjoyed these early times of fieldwork. As a volunteer, a researcher and human being the zoo is a relaxing and enjoyable field. Having begun ‘being at’ the zoo mid-winter and coming through to some extremely hot days by the end of training, I began to think about what I was packing with me and rearranging my carryall to suit the day. There are facilities in the volunteer kitchen-cum-office to lock up gear, but the point of having it with me was to *use* it, thus I ended up taking camera, recorder (being a timeslice prior to owning an iPhone), and sometimes an iPad, around with me. In consequence of the walking and carrying involved in my field, I became a much fitter anthropologist.

Another volunteer possibility emerged in guiding for After Hours tours, where groups of attendees (Weddings, 21<sup>st</sup>, Corporates etc.) are given ‘dusk’ tours of the zoo animals that

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<sup>19</sup> Home games were often ‘sponsored’ in this way to allow various organisations to collect donations from the baseball crowd.

are still accessible at this time of the day.<sup>20</sup> These tours were only scheduled for the warmer ‘daylight saving’ months, and I was offered an observer role in this touring which eventually morphed into guiding these tours. They usually began around 6pm and lasted an hour, with each guide taking around a dozen formal / party / night-attired guests to viewable captives. After the tour, the partygoers congregated in whatever function space had been hired at the zoo while we volunteers left for home. This left catering and security staff on hand to manage the human occupants of the zoo for the evening. At that time, I continued to accept any and all offers for volunteering following my supervisor’s guidance to ‘hoover everything possible up.’<sup>21</sup>

Planning for the guiding roster two-to-three months in advance, with a two-month guiding commitment being promised, made me focus on my immediate future. I attempted to circumvent interlocutor rostered times on my volunteer shifts, so as to be available to follow them around in *their* volunteer duties. Using past rosters to assume my interlocutors’ forward shift choices, I hoped to achieve improved ‘researcher’ results as the schedule and its implications became better known to me. I had asked for interlocutors’ ‘routine’ rostered times when people signed the consent forms, however, from the amount of *please attend rostered shifts*, which appeared throughout the volunteer e-correspondence received, it became clear that commitment to turning up was a problem amongst guides. One steadfast, reliable volunteer told me she often volunteered when there were volunteer meetings scheduled, as guide numbers would be ‘low’ or non-existent on these Saturdays (usually). “I worked here the last meeting up at Monarto and I was the only volunteer on that day.” To which I asked, “really...the only volunteer on duty?” She seemed delighted that this had occurred:

Yes. It doesn’t happen often, but on that day it did. I took tours and lots of people were here, so there was plenty to do, but there was no one [volunteers] in the Envirodome or in the Panda Forest. It doesn’t happen often though.

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<sup>20</sup> Many species, for example, Giant Pandas, Giraffes, Tapirs & Orangs, have night-quarters, which are off limits after hours. Sometimes, captives are left out for a time, for viewing at night, however, at these early stages of fieldwork I did not know the rules behind which captives were left out and which were night-quartered.

<sup>21</sup> Which I take to be an anthropological application of holism, where, in an ethnography, “the simple rule of thumb [was] that nothing was too insignificant to record” (Strathern 2001, p. 2).



Planning ahead for my own and interlocutor's shifts aside, my research was ongoing and varied, sometimes difficult but thought provoking. I learnt to juggle my hours in new ways and do the 'office' work as regular 'shifts' in my day. I worked out the best ways to back up and protect my work, to file and easily recover information, to cross-reference as I recorded and also to 'journalise' my feelings and thoughts. Sometimes I felt overwhelmed, but by keeping on keeping-on, I felt (mostly) committed and conscientious. When I didn't, I practised yoga.

My initial training as a volunteer and the first few months of volunteering, as described above, flew past. During this time, I also researched at monthly 'Volunteer Meetings' held at the three Society zoo-sites of Adelaide, Monarto, and Warrawong.<sup>22</sup> These monthly meetings were well attended by volunteers from all three sites and offered great opportunities to meet new volunteers and staff. The changing venue offered behind-the-scenes looks at all three zoos and encounters with staff at Monarto and Warrawong.<sup>23</sup> Volunteer meetings offered off site information about conservancy programs (intra & interstate, and internationally) as well as staff arrivals and departures. In addition, keepers gave talks on their charges, and management and / or Board members informed us about the latest media and government interactions. Some of the meetings incorporated a behind-the-scenes tour for the volunteers.

At one Adelaide Zoo meet, for example, the Head Vet gave a tour of the Animal Health Centre (AHC). At another, I watched the opening of a 'Tasmanian Devil' exhibit by the CEO at Monarto. Volunteer meets were also the chosen place for the incumbent CEO to say 'goodbye' to the volunteers before his departure in 2012. These meetings offered informative background information and were a source of much volunteer discussion afterwards. I continued attending these meetings throughout fieldwork, and at one, I introduced myself to my 'enabler.' This occurred mid-2012, and, as the saying goes, 'I never looked back'. This volunteer had been spoken of during training, and then by guides on my shifts, as someone who was incredibly knowledgeable and who had once been the trainer for both OBT and volunteer guiding. Robert was pointed out to me at a

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<sup>22</sup> In February 2013, the zoo announced that, "Zoos SA would cease business operations at Warrawong Sanctuary" (ZoosSA 2013a, p. 6). They cited financial and fire compliance requirements as the cause.

<sup>23</sup> In Adelaide, the meetings I attended were held in the Santos Building, outside the zoo.

combined meeting at Monarto Zoo in May 2012, and he agreed to participate in my research. We arranged to meet up at the zoo the next day.

Robert, as a long serving volunteer and past trainer, was able to introduce me to keepers, volunteers and other staff during my time at the zoo. He walked me around and told me stories from his zoo-time childhood memories and his volunteer attendance. Places of yester-year were pointed out and brought to life by this interlocutor. I explained anthropology to him, its origins in ‘deepest darkest’ places, usually villages far flung from European cultural origins, and how the zoo was ‘my’ village. He laughingly referred to himself as my “village idiot.” He was anything but, I have to say. There was some ‘political’ baggage associated with his help, however, he alerted me to this possibility, and so I trod very carefully. His support enabled diverse encounters in the field and Robert appears at various spacetime matters throughout the thesis.

### **Off Site Speaking and Behind-the-scenes Tours**

After my first year in the field I ventured out to other venues. A few interlocutors gave Off-Site Speaking (OSS) engagements on ‘Zoo’ specific talks to various South Australian groups, for example, Rotary, Lion, and Probus, as well as Church groups and retirement homes. I negotiated to attend a few such presentations. Different volunteers had diverse areas of expertise and were allotted different OSS groups. For example, one speaker stated, “I can tweak my talk to suit most theists and atheists alike. I tend to get all the Church groups because of this.” This atheist / theist divide was an *almost* unnoticeable, but definitively attendant, split at the zoo. One ex-volunteer trainer informed me that when she managed the volunteer training, she had been told by management to be neutral on this divisive subject, and she had followed these instructions. Since this time, it was noted, the volunteer trainers had taken a more secular stance. Another OSS speaker stipulated that geography was the basis for their allotted talks, stating, “near to home suits me fine.” What followed for me was a wide-ranging tour of the Adelaide metropolitan area in pursuit of observing these various perspectives on the zoo, and the Society.

During 2012 the offer for me to guide behind-the-scenes tours arose. These are purchased, early morning tours that last one-hour, and focus upon particular captives with their keepers. The tour names are self-explanatory: Big Cats, Primates, Bears and Hippos. They

begin around 8.30am (which allows time for problems like late comers / forgetters *and* for travel time to get to the keeper), which is an hour before the zoo publicly opens. These tours usually finish at around 10am and visitors are then free to spend their time in the zoo at their leisure. My training in these tours consisted of a volunteer buddy-up system with a long serving behind-the-scenes guide who showed me the process on a couple of tours. Keepers conduct these tours, and, as ‘value-added’ purchases of ‘up close with captives’ experiences for visitors, behind-the-scenes tours are an important income stream for the zoo. The purchase value for the buyer is the direct contact and interaction with keepers and closer than usual proximity to captives, often in behind-the-scenes spaces, and often with a feed-the-captive moment included. Volunteer guides are minimally involved in the actual tour, limited to collecting visitors, checking names, tickets, appropriate foot attire, articulating the occupational health and safety aspects of going behind-the-scenes and around the zoo in general, and then guiding people through the early morning, empty-zoo, to the keeper.

During the tour, guides offer to take photographs (using the visitors’ camera / phone), alerting people to keep behind the yellow lines for safety, holding visitor bags and being the last person to exit the area and closing gates / doors behind as the tour progresses. This is the majority of the work for volunteer guides on these tours. Chatting and asking questions when visitors are too timid to ask the keeper personally also cropped up sometimes. Having received buddied-up training I then conducted these tours independently and was rostered, on average, for two tours a month. Of course, requests to ‘stand in’ for other volunteers arose and this added to my volunteer workload. I also purchased all the tours with family or other ‘vollies’ before and during being incorporated into this guiding group, and these experiences appear in the thesis.

What pleased me most taking these tours was getting to the zoo at around 8am, in all weathers, and experiencing the near-empty zoo all by myself, or with a couple of other guides. We would enter the zoo using our zoo swipe-card and find a locker, and then head for the curatorial unit. This is a small building holding a few offices, including the curator’s office (hence the name), a central meeting room and a kitchen; it has a large, outback veranda and is used by keepers as a gathering space for meetings and breaks. Guides’ behind-the-scenes paperwork is stored in the curatorial unit, as was the behind-

the-scenes two-way radio, and thus we were privy to the building's numeric code entry. Upon entry we collected the two-way radio and the particular tour calico bag allotted to us (Hippo, Big Cat etc.), which also contained gifts for the visitors.<sup>24</sup> The paperwork informed guides of the total number, names and (hopefully) mobile phone numbers of attendees. This last item was crucial when people did not arrive by 8.30. If other visitors



Image 6:  
The Curatorial Unit.

*had* arrived, then both paying visitors and the keeper were waiting for late arrivals. A mobile phone number cleared up forgotten or altered dates or various other examples of human error. It also meant the tours were on time most of the time, as guides could take the visitors to the keeper and return to Gate Three for late arrivals.

Some of the organisation and bureaucracy of the zoo surfaced as I began doing these tours. Volunteers phone the zoo to find out if their allocated tour is booked and how many people were expected, if it is booked. This takes place the day before the tour. Some behind-the-scenes guides had narratives of being told by zoo staff that their allotted tour was booked when it wasn't, and vice versa. This meant that guides would turn up when no visitors were booked, or the guide would *not* turn up because they had been told there was no booking. In this instance there would be visitors waiting with no guide arriving. This could still be salvaged because most tours take place on days when other tours are occurring, and another guide would be able to make other arrangements. Friday 'Hippo Tours,'

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<sup>24</sup> These behind-the-scenes gifts included free coffee and discount vouchers for each participant, a zoo map, surveys, and, later in my tenure, coffee mugs. These were heavy to carry around for up to an hour and half - I once had five coffee mugs to cart around.

however, were a stand-alone event, and I would commit to these tours because afterwards I could attend PhD seminars at my nearby university campus and then return to research at the zoo in the afternoon. These were the matters that mattered to me, and so a Friday Hippo Tour became a regular feature of my volunteering month.

Image 7: A short walk through Botanic Park to my nearby university campus.



Hippopotamuses are one of the iconic zoo species. These two Nile Hippos — Brutus and Susie — are long time Adelaide Zoo residents and in some official and volunteer mediation the male (Brutus nee Albert) is referred to as the ‘oldest hippo in captivity’ or sometimes this is reduced to ‘in the southern hemisphere’, depending on the source and the recipient it seems. Keepers accentuate the positive in their captives, and gloss the hippos’ aged walking motion, their hesitation and sometimes their outright refusal to exit their night-quarters pool. It is understood that the outcome of good husbandry can be longevity and although this creates a non-reproducing captive that takes up spacetime matter — that could be focused upon reproduction in younger specimens or other species — the hippos at the zoo are utilised to maximise their Otherness and exoticness. They are the first captives encountered upon entry to the zoo; they are often the focus of lunchtime keeper or volunteer talks and twice weekly behind-the-scenes tours. Brutus and Susie are often the iconic denizens of pictorial ‘branding’ for the organisation and their end-of-days tenure is utilised to ensure maximum return with

minimum energy expenditure. I have also noted keepers ‘taking up the slack’ when recalcitrant hippos refuse food, refuse to exit night-quarters, or spend most zoo open-hours under water. For example, to entice them out of their beloved pond for a few viewable moments, three meals are offered daily.



Image 8: Brutus and Susie in their (half full and filling up) day exhibit pond.

Behind-the-scene tours offered me opportunities to experience the interactions between captives, visitors and keepers. As an experience, behind-the-scene tours also allowed insight into happenstances that did not usually involve volunteers. During my tenure, this included post-storm early morning workers on site, taking down trees and disrupting the early morning quiet *and* the timing of tours. Behind-the-scenes tours also allowed visiting spaces not visited before and one-off experiences, for example, into emergency measures taken by staff concerning captives after storms. This happenstance showed how other workers — tree loppers and removalists after the storm, for example — are integral to the zoo’s ability to open every day of the year: and the communications that allow smooth transitions on ‘set’ tours without alerting paying visitors of suddenly changed plans. In this instance, keepers would indicate (to the guide) that usual parts of tours couldn’t take place because of different events that interrupted the flow of tours. I suspect that visitors never realised their particular tours were not always the ‘set’ tour. Because of various ‘unexpected’ events, behind-the-scenes tours were sometimes these bespoke events, and this made them interesting to me, and seemingly also to other volunteers, as there was

very little ‘drop-out’ from guiding these tours. This was so, even as it meant getting to the zoo very early, with some volunteers driving from outlying suburbia and beyond to participate.

However, it never failed to amaze me just how wrong things could go, on the smallest of errors, on these paid tours. For example, presumptions of visitors were the subject of volunteer discussion amongst behind-the-scenes guides. The error would begin on the day as ‘a problem’ but in the retelling become hilarious, or justification for ‘doing something’ about repeated similar occurrences. One example, that re-occurred and followed this *problem, to hilarious, to ‘must do something’* narrative by long-serving, behind-the-scenes, guides was realising someone had ‘tagged along’ on a paid tour, thinking it would be all right to do so.

These were people who thought they could take a tour (with their friend who had a ticket) — without a paid ticket — because the zoo didn’t open for another hour and *what am I supposed to do?* Maddison, a behind-the-scenes long time guide, in one extreme behind-the-scenes example, told me this narrative.

I had three visitors this morning, according to the paperwork, but six people came in the zoo to do it. And I had to expel the three relatives who thought that they were going to go in the zoo for free. They often-times do this. A partner or someone will turn up who is not on the tour, but expects to come into the zoo, with every hope of being able to go on the tour.

Although this is a city-zoo, it is on the fringes of the Botanical Gardens and quite a walk to Adelaide’s coffee, café, and shopping precinct. Set numbers only attend each tour (dependent on the behind-the-scenes area being navigated) and ‘extras’ are not allowed under any circumstances. In most situations other guides stepped up to help sort out mistakes, collect extra gifts, or find a staffer to deal with problems. Maddison had also previously experienced a cancelled booking that was not noted on a subsequently re-booked, new date. She explained this to me:

I've had six people turn up, five of whom were people who were due to come two months prior, and I only had one person [noted down], and suddenly I had six! The

keeper sometimes does not know that, because they get the same documentation that we get. So, I had to tell the Big Cats' keeper there are *six people on the tour, not one*. So, the staff had the chance to prepare the meat samples that the people push through the wire [to feed the captives]. And then I had to go and get five more of the folders [gifts] we give out from the office.

This 'tag along' problem prompted the zoo to add more detailed information to tickets and spell out the 'ticket only' entry, but with so many avenues for errors, this would not probably suffice to stop this occurrence — one occurrence amongst many possibilities. For example, I experienced a mix up from an off-site booking agency that mismatched my paperwork and the numbers on the tour, but I never experienced anything as troublesome as Maddison relayed. These stories did, however, make me think about what to do in similar circumstances.

These different 'problems' encountered doing volunteering became part of my narrative back to other volunteers, and new guides. This occurred, as their experiences became part of my listening and learning. As a methodology, volunteering and sometimes being a visitor taking a tour, was a rich, thick, participant-observing experience that entangled me in many matters. Some matters concerned the absence of information as much as the reverse. Performing, or generating, zoo is what volunteers do; they take the matter/s afforded them by trainers, the zoo, the spacetime matter in which they find themselves entwined and attempt to make the best of it. In behind-the-scenes tours, this meant getting the 'correct' people to the keeper, ensuring people remained in between the safety lines, taking photos, chatting amiably and handing out gifts at the end of the tour. I came to comprehend how absence as well as presence matters *and* makes a difference.

### **Where methodology meets history**

Another approach in my methodology was the secondary sources available at the zoo library, where, during winter, quite a few wet and cold hours were spent in relative comfort. I had made enquiries about this non-public library which offers a rich supply of Society documents, including workplace agreements and Occupational Health & Safety papers, as well as copious pieces written by keepers, volunteers and other staff on captives, historical zoo events, figures and buildings. For example, one volunteer wrote a journal on a French sea captain, Nicholas Baudin, who had a bust unveiled at the zoo on



the 16<sup>th</sup> September 2003, the 200<sup>th</sup> anniversary of his death in Mauritius. This unveiling event was held in commemoration of his animate collecting and maintenance skills together with his seafaring abilities. This ceremony was another effort in the rewriting of, what had up to this time been, a largely British version of the southern Australian coast's cartographic history (Sankey, Cowley & Fornasiero 2004, p. 4).



Image 9: Bust of French Sea Captain, Nicholas Baudin with info board.

Baudin was said to upset his junior officers by making their ships' quarters 'holding pens' for the assorted specimens collected, thus ensuring a better passage across the world's hemispheres for the displaced, and never to return, animates within his care — if not for his junior officers! This imperial collecting was a force contextual to its times, coalescing "the complementary interests of science and nation" (Fornasiero & West-Sooby 2013, p. 72). It speaks of power, and the attempt to glorify and enlarge empire, personal history and progress, in short, an outgrowth of "the Enlightenment" (Sankey, Cowley & Fornasiero 2004, p. 9). At the zoo, Baudin's bust is another monument passed on the way to see the captives, but is also a link to the North Terrace 'arts precinct' that includes the Museum, Art Gallery, State Library and universities (of which I am a specimen — sometimes feeling like — captive): all enlightenment projects that relay the human exceptionalism, progress and control being focused upon in this thesis.

Baudin's bust and its rock plinth stands near the Rotunda, an undercover, well-used, long-serving space near the central lawn. Thomas Elder, the President of the Board donated the funds for this still standing, open to the air construct in 1884 (a more detailed narrative about this second President of the Society, and the Rotunda, appears in the *Zoo History* chapter). As a sea goer, Baudin was recognised for his ability to get life from the southern to northern hemisphere *alive*. He was one of the people who supplied France with its renowned (pre-zoo) menagerie (Sankey, Cowley & Fornasiero 2004, p. 4), and he, like many other captains of the time, also successfully transported slaves; a dark side to the *en-light-enment*. Baudin's (amongst other) south sea expeditions also resulted in many French sounding, Australian place-names. The historical zoo-library documents provided wefts of connections that place many current events into fuller, detailed, quotable nuances and, along with this zoo's online presence, provide rich ethnographic colour to many of the experiences and narratives gleaned in my field.



Image 10: The Rotunda sits near Baudin's bust and the pelican enclosure.

### **Other research efforts**

Other volunteering efforts did not go unnoticed during fieldwork, including Zoo Watch, where volunteers stand outside exhibits and follow the animals around watching for particular behaviours. These are then noted upon bespoke forms that quantify particular captive behaviours, for example, pacing or plucking out their own fur / hair. Both of these behaviours are thought to be stress related and Zoo Watch, as performed / generated by volunteers, allows keepers to be aware of captive behaviours they might notice but remain

unaware — in the extent and / or range of behaviours, or interaction with other captives — of its emergence. Another of my participants was a behavioural enrichment (BEEZA) volunteer, and we bagged up Zoo Food pellets for the children's zoo together, took around behavioural enrichment items to keepers, stuck popcorn in magazines and joined the rest of the BEEZA crew shift at the coffee shop for lunch.

So too, I noted the 'work-experiencers' at the zoo who turned up for one day or more to experience keeping firsthand. Volunteers would often greet them at the gate whilst awaiting paying visitors for behind-the-scenes tours, and the diversity and numbers of people who took up this experience was impressive. I spoke to a few who were nervous about doing *actual* captive work in the children's zoo, and one young woman who was hauling buckets of hippos' faeces from the front day enclosure to the night-quarters at an amiable pace with enviable athleticism.

I also stood and watched the Information Desk volunteers' hand out exit passes, take bookings for zoo cabs (animal-inspired, cartoon-like, fibreglass, perambulators for small children), and cleaned up said cabs after rain filled nights. That is, I generally 'hung out' at the information desk chatting. The Pot-A-Zoo people are mostly behind-the-scenes, but they do emerge to dead-head the agapanthus, turn over soil, plant empty enclosures with suitable, zoo-grown flora, and clean up fig tree droppings. Many of my interlocutors have double jobs at the zoo so they are informative on these other workplaces. Their willingness in speaking to me about their other volunteering experiences reduced the tension felt when I realised it would not be physically possible to take on all of the volunteering jobs, so as to experience them myself.

As mentioned previously, to be a zoo volunteer one has to be a member of Royal Zoological Society of South Australia, and in that capacity of Society member I have taken a few Members Tours. These are offered to all Society members <sup>25</sup> and occur (usually) early morning (before zoo opening) on the last Sunday of the month. They are inexpensive and well frequented excursions into the behind-the-scenes places of the zoo. Dependent upon what is scheduled on any given Sunday, access is possible to Minchin House where management are accommodated, the Nocturnal House with the lights on and

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<sup>25</sup> In the 2013 Annual Report (AR) they recorded "2,067 Life memberships [and].... just over 30,000 Zoos SA members as at 30 June, 5,000 more than the previous year." (ZoosSA 2013a, p. 30).

the inhabitants sleeping, the Animal Health Centre and a vet, the food stores, the meat store, and various behind-the-scenes exhibits: native animals, birds and baboons, for example. Member's Tours offer insights into places usually off limits: The Boardroom and the Chief Executive's office in Minchin House, for example, and the cockroach and cricket breeding rooms in the depths of the Nocturnal House. Fellow guides conduct these tours and at one stage the organiser asked if I wanted to volunteer to 'do' these tours. This was another declined opportunity because at that stage I was winding up to come out of the field.

Having so many people on site that are not part of the paid workforce and that outnumber that workforce,<sup>26</sup> and are therefore not under the rubric of 'workplace relations,' or that are held at an arm-length distance from 'responsibility of management,' made volunteering one of those same / different placings, as a field. The separation between paid and unpaid workers is policed and is thematically interesting because some people cross the boundary in both directions; staff and board members become volunteers, and vice versa.

### **Explanations about anonymity, debt and wordings.**

In the writing up phase, to ensure anonymity for my interlocutors, I have altered names, genders and if necessary, ages and positions. Also, often the captive species being 'kept' is *not* mentioned or named because this could possibly identify a particular keeper. The keepers did rotate through different captive rounds but this waxed and waned. Therefore, when the captive species is not evident, this has been my chosen purpose. So, too, I have shortened the Royal Zoological Society of South Australia to simply the Society. Further, my emphasis on 'Other' rather than 'other,' is to extend the divisive separation in visual form. Lastly, I use '/' (forward dash) to delineate but not separate out, as used by new materialists (another terminology from feminist posthumanism). The forward dash signifies an outcome still subject to movement, that is, a becoming rather than a being, or evolving rather than a final outcome. Forward dash signifies *not classified as such for all time*, but is explanatory within these parameters in this context, or spacetime-mattering.

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<sup>26</sup> Volunteers were "500 strong" according to the 2013 Annual Report (ZooSA 2013a, p. 6). Staff numbers were not present in this, or the previous year's annual report (2012a). The 2011 Annual Report however, named all the staff, quantifying this group at 278 for the preceding 12 months (ZooSA 2011a, p. 106).

So, too the spacetime matter of my tenure as fieldworker and volunteer took place during trying times for the Adelaide Zoo. It was early 2011, just 30 months after the Global Financial Crisis ‘hit’ and years of an unfolding debacle of zoo-debt. The Society had borrowed a large sum of money on the hope of sustained growth, or at least similar economic conditions to the preceding years. Alas, as posthumanism points out, indeterminacy rules rather than certainty, and the growth or similar conditions to the past, did not eventuate. What did eventuate was a crisis, and my fieldwork was entangled with the zoo attempting to disentangle itself from the worst aspects of this and to carry on as before, as a worthy place. They sought public and government support, that is, to be valued positively and supported economically by fellow humans, despite their debt. I examine this throughout, as the commercial aspects of western life infiltrate all aspects of life today, if not actually manipulate the same: commerce is the conscious purpose activity of our times; we live in market world. As do the captives at the zoo.

To close these explanations, in the following chapters posthuman words are utilised (and explained) for example, “becoming” to explain the posthuman understandings of continual emergence through processes and practices — and the possibility for change that this affords — where we are human becomings and the captives too are becomings. Emergence is another usage throughout to explain this phenomenon where rather than pre-formed and ready to be filled with content ‘things,’ there is an entangled process-practice. So, too, (say I laughingly now) entangled appears throughout as a wording to explain worlding, which of course, leads me to ‘define’ worlding when really this too is a process practice of becoming, emerging, and entangling but incorporating different scales. Finally, what is western thinking or civilisation or culture, takes books to explain, and includes my four theorists’ works as well.<sup>27</sup> Chapters four to seven examine western thinking through the processes and practices of zooing.

## **Conclusion**

The zoo reproduces itself whilst having onsite many of the relations not counted for centuries — having been ranked lower in our western hierarchical system and thus not included — as detailed by Gleeson-White (2011, 2014) in the Introduction Chapter. Comprising matters animate and inanimate that emerge as people, captives and enclosures

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<sup>27</sup> For example, Rose (2004), Srathern (1992) and Willis (2005).

— all of which are human categories — means, in zoos, these matters must be separate, yet perceivable, because that is what makes a zoo: isolated (from home-habitat), observable (to humans) Other life forms, under human control. But, as I discovered, this only works because of the many representations juggled to perform zoo. Perceiving the mechanisms of these representations gives access to the processes and practices at which scales are glossed, absences and presences are performed, and thus, access — or at least a glimpse — into which values are held as prime. For captives, keepers, volunteers, and visitors, this is zooing.

I came to realise that because of my research, I knew connections and histories that remained unknown to fellow volunteers. Furthermore, there is a significant dropout rate during and after volunteer training. Within my trainee-cohort for example, about a third of its participants ‘dropped out’ of volunteering six months into my guiding. My position in respect of keepers was somewhat altered too, because a few of them were interlocutors. However, keepers are very busy and I guide-volunteered to reciprocate the organisation, so as to thank them for granting permission to be amongst them in the first place. Having worked and researched at the zoo for a few years I felt as if my presence as a researcher faded into the background noise of general volunteering, a place I would like to re-inhabit at some future date, if possible. Of course, it would be with a new cohort of trainee volunteers, keepers, management, captives, species, and builds, with maybe a few known faces and same-old-places, in the mix. Like the rest of natureculture, nothing stands still. In sum, as a methodology, participating *with* Other life forms and observing them *through* volunteering proved worthwhile and enjoyable.

In the next chapter, on zoo histories, some of the methodology described here returns in the narratives about built structures, captives, people and other matter/s, where I became entangled, through participant observation, with written, spoken and mediated in/formal narratives, as they emerged before, during, and after my fieldwork.

## Chapter Three

### *Zoo History*

Some of them knew pleasure  
And some of them knew pain  
And for some of them it was only the moment that mattered.  
(Browne 1974)

#### **Time-knots**

This chapter's retelling of the *Adelaide Zoo's* history is not a linear narrative of events, special occasions, particular people, or framings of epochs. Rather, I relate my journeying through the place and its narratives, as past, present, and future co-mingle to cohere around matters taking my attention where a confluence of my fieldwork memories, notes, methods and actions are "time knots ... entanglements of real life in time" (Chakrabarty 1997 in Rose 2004, p. 25).<sup>28</sup> They are in "contrast to modernity's privileging of linear sequence in which the past is overcome and consigned to the past" (Rose, 2004, p. 25). This is why Chapter Two *Fieldwork amongst the captives* and this chapter are both methods and history 'entangled' within fieldwork, as are matter/s other than human.

(H)istories, have become stories of exclusively human achievement played out over and through a seemingly indifferent medium of matter and objects made up of everything else. Whether their emphasis has been on material transformations or the changing meanings of 'nature' ...[where] only subjects or agents are people, while everything else consigned to nature becomes so much putty in our hands. (Whatmore 2014, p. 80)

A posthuman perspective contends that the "putty in our hands" has never really been under our control, and zoo narratives are revealing in this way. For example, past zoo narratives, read today, thwart depictions of 'exclusively human achievement.' A more expansive spacetime-mattering allow other matter/s — co-opted into human practices and processes (often accompanied with a distinct 'timely' representation) — an alternate

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<sup>28</sup> The "writing of history must implicitly assume a plurality of times existing together, a discontinuity of the present with itself" (Chakrabarty 1997, p.28-29). Chakrabarty, D 1997 'Minority Histories, Subaltern Pasts', *Humanities Research*, Winter: 17-32.

reading, or interpretation. This chapter involves other-than-human matters because more than just humans have agentic possibilities, and during fieldwork, past matters informed present matter/s.

As covered in the Introduction, these posthuman perspectives took me by surprise. I found a posthuman *non-ranking* way of thinking astonishing. To comprehend my sameness / equivalence to all matter, was also astonishing. Before this realisation I had (as I now perceive people all around me doing) assumed all else was *not as important* as human. So normative was it to be in this bubble of exceptionalism that to perceive it took my breath away, took my thoughts away. My breath returned but my thoughts have continued on this journey.

### **Arrangement of chapter**

I begin this chapter with perspectives on collecting as practiced by Euro-westerns expanding across the planet during their early empire and colonial building endeavours. Next, collections as objectifications of Other that allow hierarchical rankings to be viewed while westerns remain outside of the exhibit, as producers / spectators of this place or meaning, that is, westerns attempt to be *there* (in control) but *not there* (paraphrasing Mitchell 1989). I examine one long-lived avian captive to illustrate this human ‘in control of but separate from’ progressive narrative through his movement through the spacetime of the zoo. Then, a journeying through Adelaide Zoo’s foundational beginnings and how the normative acclimatising approach of the colonisers entangled the land allotted, the zoo entries permitted, and the matter/s of ritual that signified elite values and people. Thomas Elder, as one such elite, is explored through his various contributions, which still enmeshes Australia’s ongoing narratives of conservancy and its problems. More acclimatising narratives follow, where fish, starlings, and Tammar Wallabies weave through the zoo’s past. In particular, I follow wallaby journeys from pest to resurrection, where the violence of ‘best practices’ provides historical weft to re/emergences in the ethnographic data chapters. Penultimately, I take a quick foray through this zoo’s ‘global-through-colonial’ beginnings, where the Society’s name altered to suit cultural representations circa 19th and 20<sup>th</sup> century. Finally, various zoo ‘captive’ matters, as expressed via a newly installed President of the Board and Chief Executive, provide interesting juxtapositions with



foundational and empiric / colonial zoo histories. It is these latter narratives to which I now turn.

### **Collecting and categorising**

Globally, zoos have experienced many historical meanings, with various ‘foundation’ narratives (Roberts 2005, p. 11). At these intervals, the metrics of power created particular values people wished to display. My focus here is on western cultures’ past-present-future meanings of zoo. For example, early colonial Europeans were curiosity collectors who wished to privately display novelty exhibitions, connoting wealth and prestige (Rothfels (2002, p. 3). These private collections of heterogeneous objects, or ‘curiosity cabinets’ (Weil 1997, quoted in Frede 2008, p. 3) sometimes morphed into public displays of exotic creatures from the other side of the earth (Rothfels 2002, p. 19). Another narrative argues collecting was, for imperial elites, a means of parading power (Kahn 1995, p. 324). Display was utilised by those doing the exhibiting, less for novelty than for personal advantage. In this case, “collections were constituted on the basis of power / knowledge, an impulse to dominate the world, to harness its heterogeneity and bring it within a knowable compass” (Berelowitz 1990, p. 72).

The resources to journey, capture, return and exhibit various objects, were a patent display of power, and museums, zoos, and circuses all fulfilled this aspect of European collecting (Rothfels 2002). By juxtaposing heterogeneous captured objects, collectors wrote a supremacy narrative which conferred authority and resisted challenge (Kahn 1995).

In collecting some objects and not others, in describing and naming them, in displaying them in one way as opposed to another, and in constructing contexts for them, museums establish their sense of authority. (Kahn 1995, p. 324)

Another ‘authority’ motif was that of the spectacle, and in the 19<sup>th</sup> century these western-held extravaganzas emerged in the cities of Europe as global Exhibitions, Expositions, or Congresses. These spectacles amassed diverse objects to be viewed by local and international westerners (Mitchell 1989). Mitchell, in looking at early museum making, delves into how the people *represented* in these extravaganzas — Egyptians at the Paris 1889 World Exhibition in this instance — reacted and wrote about it later.

Egyptians and their homeland were characterised in an exhibit of boisterous bazaars, replete with donkeys, crowds and mayhem, which these ‘exotic’ visitors viewed from atop Paris’ newly erected Eiffel Tower. The representation below them was replicated as exemplifications of “medieval Cairo” (Mitchell 1989, p. 217).

The Egyptian visitors were disgusted by all this.... Their final embarrassment had been to enter the door of the mosque and discover that, like the rest of the street, it had been erected as what the Europeans called a façade. (Mitchell 1989, p. 217)

Inside the mosque’s facade was a café. Mitchell argues that western separation and objective viewpoint organised these spectacles to “a method of order and truth essential to the peculiar nature of the modern world” (1989, p. 236). Modern, as Latour (1993) would have it, was a means of signifying science-orientated, western people (paraphrased p. 101).

The exhibition could be read in such accounts as epitomizing the strange character of the West: a place where one was continually pressed into service as a spectator by a world ordered so as to represent.... the world conceived and grasped as though it were an exhibition. (Mitchell 1989, p. 222)

The west perceives in a certain, absolute, Newtonian, scientific way. Whereas Mitchell—incorporating the monumental deconstruction of Orientalism by Said (1978) — shows not just an imperial, Victorian perspective, but how the west views reality (Mitchell 1989, p. 236). Where, since we are not in nature, reality has to be represented through the prism of our presumption of this separation.

This insight into our focus on collecting, and how it was perceived by those thus exhibited, gave me pause for thought. The paradox Mitchell (1989) explains is our representational attempt to be objective, that is to perceive without being in the actual space *and* to experience the space as real, at one and the same time (paraphrased p. 231). For me, in my research, to recognize how we think representationally was a light bulb moment. It made my own culture ‘strange’ to me.

The European wished to exclude himself in order to constitute the world as something not-himself, something other and object-like. At the same time, he also wanted to experience it as though it were the real thing.... a contradiction between the need to separate oneself from the world and to render it up as an object of representation, and the desire to lose oneself within this object-world and to experience it directly. (Mitchell 1989, p. 231)

Zoos are detached from the concept of museums today, but in the “21<sup>st</sup> century, zoos can still be recognized as places where the world of nature can be re/presented as a ‘cabinet’ and the wild animals as ‘curiosities’” (Frede 2008, p. 3), that is as “object-like” yet “the real thing” (Mitchell 1989, p. 231). The Adelaide Zoo is linked with other culturally progressive institutions, residing as it does within the ‘Arts Precinct’ of North Terrace. This bordering-city terrace holds the Art Gallery of South Australia, the South Australian Museum, the State Library and the University of Adelaide. Moving west along this terrace stands Government House, State Parliament, the city’s railroad station and the newly completed Royal Adelaide Hospital, recently relocated from Botanic Park, where the zoo resides. The zoo:

...has close links with the nearby universities and the South Australian Museum. Over the years many animals which have died, after being taxidermally stuffed, have found a new ‘home’ in the Museum. (Frede 2008, p. 82)

The wayfaring history of one captive winding through my fieldwork is a link between museum and zoo, and between a ‘there but not there’ spacetime matter.

### **Zoo to museum**

“Greater” was one long-lived captive who died during fieldwork, and whose ‘remains’ were earmarked for a zoo-museum journey with many representations about him emerging. One long serving volunteer remembered visiting Greater in her childhood, during World War Two, “I mean that flamingo is actually a bit older than me” (Murphy 2006).

Image 11: *Greater* the Flamingo in his public day exhibit.



A strong public response to the death of this flamingo was announced across many platforms and in the Annual Report.

Adelaide Zoo said farewell to one of its most iconic residents [in]... January ... Greater, the Greater Flamingo was humanely put to sleep, as at 83 his quality of life had deteriorated due to complications associated with old age. (ZoosSA 2014a, pp. 16-17)<sup>29</sup>

This death was also documented in this report under “Key media highlights” (p. 27) and Fundraising:

We also received a large number of gifts in response to the death of our Greater Flamingo. The care shown by our zoo keepers over so many years was recognized by the public who responded to the news of Greater’s death with gifts, condolence cards, photographs, and social media posts. (p. 30)

Finally, Greater was the cover animal for that year’s annual report and is to be memorialized within the zoo, according to the Chief Executive.

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<sup>29</sup> This age of 83 as of January 2014 makes Greater’s birth date as 1931. I do not know the source of this dating.

Plans are currently underway to erect a permanent memorial to Greater within the zoo to honour his life and the impact he had on our zoo community. (ZoosSA 2014a, p. 6 Chief Executive's Report)

This particular bird held a special place in people's memories as the flamingo beaten up by a group of young people in 2008 during zoo hours, an event that created an avalanche of local and global reportage (*c.f.* The Guardian, Examiner, World Today, YouTube). Up until this time this elderly inhabitant was known as "Flamingo One" but subsequent narratives refer to 'it' (gender was unknown until autopsy in 2014, and the bird was male) as "Greater." The remaining flamingo is a Chilean, now referred to as "Chile" or "Chilly" ("Flamingo Two" before the 2008 incident).<sup>30</sup>



Image 12: (L – R) Flamingo Two (known as *Chile / Chilly*) and Flamingo One (known as *Greater*) in their public exhibit.

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<sup>30</sup> The spelling alters in different zoo media. Referred to as "Chilly" upon Greater's death (ZoosSA 2014c, p. 1), and as "Chile" in the 2016-2017 Annual report (ZoosSA 2017a, p. 2).

Greater's age, at the time of his beating and death, also drew much attention. The *Wildlife Walkabout* notes, given to all guide trainees, states the Greater Flamingo's lifespan can go beyond 40 years, with the note about this particular bird stating "date and place of hatching unknown, arrived at Adelaide Zoo in 1933, thought to be at least 80 years old" (ZoosSA 2011f, p. 3 Section Five). In many of the reports of Greater's attack and death he is referred to as the world's oldest flamingo, for example the Guardian's headline reads; "World's oldest flamingo dies aged 83 at Adelaide Zoo" (Friday 31 January 2014). This article also states Greater may have arrived from either Hamburg or Cairo zoos, a possibility not mentioned in other sources, including from the Society. The attack in 2008, and loss in 2014, were both genuinely felt and quickly employed in zoo mediations.<sup>31</sup> The flamingo gained a public name as opposed to a number, and his longevity and resilience sealed his memorial future. Greater's body was donated to the local museum, as many previous Adelaide Zoo captives had been (Frede 2008, p. 82). The CEO wrote,

These remains may either be buried or the ashes scattered as part of the permanent memorial to Greater within the zoo. We will also have input into the signage that will accompany the public presentation of Greater within the museum.... we hope the permanent memorial... will contribute to the awareness, conservation and appreciation of this amazing African species. (Bensted 2014)

Benbow argues "the loss of an individual animal presents an opportunity to remind us of the potential loss of a species" (2004, p. 391). This opportunity was fully embraced in this particular instance.

Greater's impact was through re/presentations of media condolences, of a long-term captive as "iconic", of being long-lived and therefore an example of the zoo's 'best practice' keeping, gaining an after-life representation through memorial signage at the zoo and as an artefact in a museum. 'He' went from the zoo *as* a museum — in Mitchell's sense of a contradictory place where westerns re/present *objects* to people who want to experience this directly as *reality* (1989, p. 231) — to (the possibility of) an object *in* a museum, after life.

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<sup>31</sup> One volunteer articulated the care one well liked bird keeper had shown to Greater at this time, how the keeper held the bird cradled up to them like a 'child' as the flamingo was taken to the vet. This event happened three years before my fieldwork, but it still held strong narrative resonances amongst the longer-term volunteers.

For myself however, Greater's history became a narrative other than the official representations offered. He was a number before a beating, and it amazed me that *He* became a 'he' only after death. Apparently, avian gender determination, or bird sexing, is a difficult process. Ninety-five per cent of bird species do not have external genitals, which means, in the majority of avian males, no penis (Prum 2017, p. 178).<sup>32</sup> Further, due to Australia's Quarantine Laws, the importation of birds, or bird eggs, sperm etc. is problematic and therefore, after this death, only one other representative of the category 'flamingo' resides at the zoo, without the probability of obtaining more. Many volunteers voiced this particular concern, as they did about many other old zoo captives.

As a western progressive representation, Greater occupied / occupies numerous categories. Perceiving him through Chakrabarty's (1997) "time-knots" of entangled movement, reveals the non-stop human interventions into Other life forms' emergences. All these perspectives manifested for me due to one avian death. Many other progressive narratives emerged as 'time knots' in earlier histories about the zoo, including the interventions by humans once called 'acclimatisation.'

### **Acclimatising**

In his task of plotting the first hundred years of the Adelaide Zoo, Rix states the "Acclimatisation Society of South Australia was inaugurated in 1878 but it was not until 1883 that the Gardens were opened to the public" (1978, p. xiv). Acclimatisation was part of the rational and empiric expansion of European colonisers around the globe (Anderson 1992, p. 134). Under these auspices acclimatising societies emerged as humanist organisations where progress and control over exotic life forms was practiced under the umbrella of enlightenment thinking. Acclimatisation was;

Respected as science, it permitted the formalizing of a world-wide exchange of plants, animals, and people, and laid the intellectual foundations for the supervision of agriculture, human behavior, and colonial settlement. (Anderson 1992, p. 136)

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<sup>32</sup> I wondered if the ancestors of birds, Dinosaurs, were as un-endowed as 95% of avian species. Prum, however, set me straight: "Birds originally inherited the penis.... [but it] has been lost several times independently...[including] in the ancestor of all Neornithes - the group that includes 95 percent of species of birds" (2017, p.361). Similarly to Greater's 'sexing', it wasn't until Chile's death, and its reportage in the 2018 Annual Report, that this flamingo became "she" (ZoosSA 2018, p. 19).

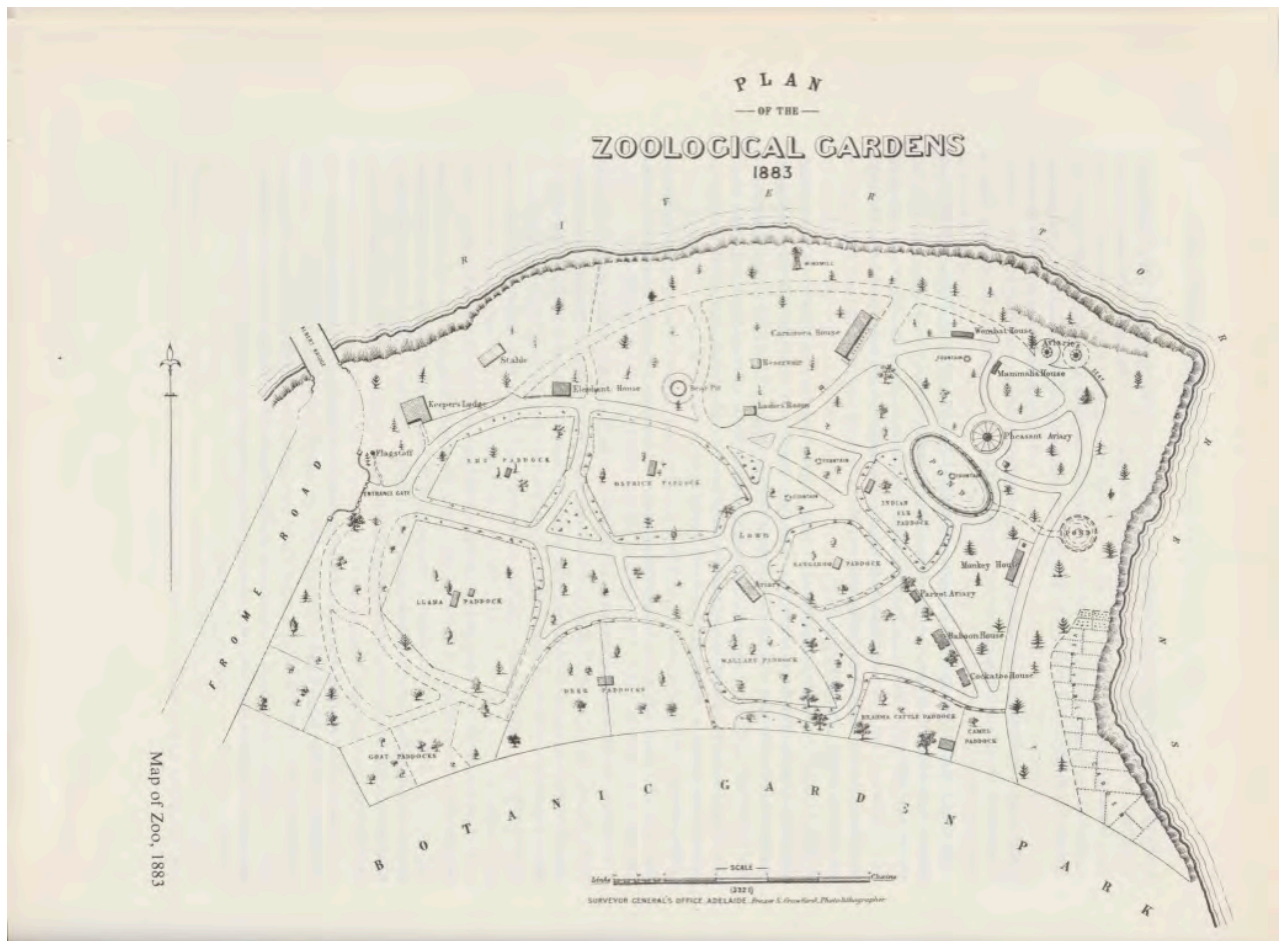


Image 13: Map from 1883 (Rix 1978, p. 8)

The British acclimatising societies particularly leant towards elite landholders with their breeding and domestication endeavours, where economic gains were to be found (Anderson 1992, p. 147). The Acclimatisation Society was originally granted “6 hectares obtained from the Botanic Gardens of Adelaide” (ZoosSA). “Although it has now expanded to eight hectares, it still remains the smallest of the major Australian zoos” (Frede 2008, p. 79). It is from this maximum of 8 hectares that the land has been given back to the Botanic Parklands. At the beginning of my research, in 2011, the zoo’s “current specimen numbers = 2428... while the species numbers = 273” (ZoosSA 2011a, p. 43).

The *Royal Zoological Society of South Australia* emerged from the originating acclimatiser group but suffered, or suffers from, “the severe handicap of an extremely small site — it is by far the smallest of the first class zoos in Australia” (Rix 1978, xv). The author continues that, although replete with both achievements and setbacks over its.



history, this zoo's "failures and disappointments...[are] traceable to the inadequate area available to the Society throughout the whole period" (Rix 1978, p. xv). Although Rix was referring to the zoo's first hundred years, people perceive a size handicap today and some of the ramifications of this lingering perception, and lived reality, are detailed in this thesis.

Other ongoing implications from the past was the proposal to acclimatise exotic other species to this landmass of the southern hemisphere. Rix's editorial of this practice, one hundred years after the fact, is critical from the perspective of humanist progress narratives, circa 1978. These concepts, he argues, were:

...born in very dubious circumstances.... the very antitheses of modern ideas of zoology and conservation and although pursued for only a few years they have had a far reaching affect on many forms of indigenous wildlife both animal and vegetable. (Rix 1978, p. 4)

A desire for respectability motivated a name change from the Society, which added 'zoological', and with it a shift in primary focus away from acclimatising to zooing. "In 1882.... the name was registered as the South Australian Zoological and Acclimatisation Society" (Rix 1978, p. 4).

Its first years were principally narrated as dominion of human culture over wild nature where, "exhibits served as emblems of colonial mastery over the animal world" (Anderson 1995, p. 281). Therefore, this zoo's history captures, and is entangled within, the culture and times of the British Empire, colonial and post-colonial Australia, and hence the representationalist western paradox of being separate but desiring to be within the exhibition experience, that is, to regard the world as if an object on display, yet reality (paraphrasing Mitchell 1989, p. 222). Likewise, it is entangled within the particularities of the state of South Australia and its capital city, Adelaide (Anderson 1995, p. 280). One personage who took my interest was the Society's second president, Thomas Elder, who became another 'time-knot' experience for me.

### **Thomas Elder**

Rix (1978), summarized the Society's first report from one hundred years prior. "The Annual Report included the first list of exhibits in the new Zoo which was opened on the 25<sup>th</sup> April 1883" (Rix 1978, p. 10). The Society relied on prosperous benefactors giving large donations in the early years and was "faring very well through its many benefactors" (Rix 1978, p. 14). Sir Thomas Elder was one of the first Board members and over his time on the committee he gave thousands of pounds as well as numerous animals to the Adelaide Zoo. However, forty years later, the Zoos SA website contradicts Rix (1978) April dating, stating that "Adelaide Zoo opened to the public on 23 May, 1883" (ZoosSA). This contradiction will be returned to a little later, for now I will explain my journey, briefly alluded to in the Methodology chapter, around the personage of Elder.

One large donation, by Elder, resulted in a building that still stands and was fully utilised during my time in the field.



Image 14:  
"19-sided  
Rotunda."

Erected centrally in the zoo in 1884 this large, open to the elements, heritage listed building known as *The Rotunda*, stands next to the central lawn and a majestic Jacaranda tree. My guide tour notes state this building is "unique by having nineteen sides" (ZoosSA 2011f, p. 15 Section Two). Elder's 'reliable wealth benefaction' mirrors today's zoo sponsorship by corporate interests (Banks and energy suppliers for

example).<sup>33</sup> Corporate support for various builds and activities around the grounds are concomitant with prominently displayed advertisements announcing these assistances.<sup>34</sup> Furthermore, when a large debt accrued, around the time of the Global Financial Crisis, the Society turned to the banking sector and the state government as current ‘benefactors’ (ZoosSA 2011d).<sup>35</sup>

Returning to Elder and the zoos’ beginning, and as detailed by Rix (1978), the importation and release of exotic others, as set out by the original acclimatisers, have proved deleterious for this continent. This was recognised and alterations made to the Society’s *raison d’etre* and an addition was made to the Society’s name. However, at this early stage of proceedings, Thomas Elder, the second President of the Society, had other priorities.



Image 15: Camel offloading  
Author photo of the *Port Lincoln Railway Museum* photo

<sup>33</sup> My own university was also a beneficiary of this particular personage. “Many staff will know the University of Adelaide was founded on the back of generous philanthropy from donors such as Sir Walter Watson Hughes and Sir Thomas Elder, who shared a vision that the fledgling South Australian colony needed a university to educate its young people” (Davis 2019)

<sup>34</sup> For example, during fieldwork the Westpac Envirodome and AGL Panda Forest Solar Panels.

<sup>35</sup> This Zoos SA reference begins “We are pleased to advise that we have reached agreement with both Westpac and the State Government on a plan to restructure the financial position of Zoos South Australia that will enable it to move forward with certainty (Zoos SA 2011d).” I examine these entanglements in the Society’s recent history in chapter six.

My first indication of these priorities was when I came across a picture in a Port Lincoln museum, whilst holidaying in the area. Hung up with numerous other past-local events, this picture, showing a camel suspended / freighted in the air being unloaded between the ship Bengal and a dock, took my interest. The caption read:

A camel being offloaded from the steamer BENGAL. It was one of the shipment of 293 camels imported by Sir Thomas Elder for use in Central Australia in 1884.

In a Report to the Bureau of Rural Sciences Agriculture, Fisheries and Forestry, Australia, July 2008 entitled *Quantifying the population dynamics of camels in the arid and semiarid rangelands of Australia*, Elder is described as being the progenitor of:

...the initial nucleus of camel source population. Camels were beginning to prove their usefulness in commercial freight hauling and were dispersed from Beltana station to NSW, QLD and WA. (Spencer et al. 2008, p. 7)

In 1866, Elder with another fellow, “imported 124 camels and established the Beltana breeding station. Focus was placed on breeding rather than the continual importation of camels” (Spencer et al. 2008, p. 23). Along with breeding camels, Elder was still importing them, according to the Port Lincoln museum photo, eighteen years later. Therefore, rearranging the placement of the name (category) from acclimatising to zoological by the Society did not impede Elder’s 19<sup>th</sup> century market-world inclinations.

In colonial, nineteenth century Australia, camels provided exploration and infrastructure transport across (what appeared to European senses as) barren, dry lands, hauling people and freight, great distances (Spencer et al 2008, p. 8). Delving further into the history of this former president, and on a zoo member’s tour, where we were taken around Minchin House,<sup>36</sup> I came across a framed, glassed, Presidential Chain. This chain held the chosen emblems of each president beginning with Sir Samuel J Way in 1878, and his choice of a Thylacine, commonly known as a Tasmanian Tiger. Sir Thomas Elder<sup>37</sup> appeared second on the list, and his choice of presidential emblem was a camel. The 2008

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<sup>36</sup> Minchin House was built in 1887, as a home for the first Director of the Society, Dr R.E. Minchin. It then housed three generations of Minchins who all became Directors, a dynasty that lasted until 1940 (Rix 1978, p. 4). During fieldwork this was the Administration Building, housing the Boardroom and general office.

<sup>37</sup> Elder was President from 1883 to 1886 inclusive (Rix 1978, p. 19).

Australian camel report quoted above identifies Elder as the impetus behind an ecologically damaging “invasive.... pest species” (Spencer et.al. 2008, p. 5).

Thirty seven percent of the Australian continent is now occupied by feral camels with recent population estimates of 1,000,000 individuals. At the current rate of increase, the population is estimated to double every six to eight years. There is growing evidence that at these densities, feral camels are adversely impacting on environmental and cultural values and infrastructure in the arid zone. (Spencer et al. 2008, p. 5)

The report suggests that quantifying the impacts of this camel importation / reproduction outcome are difficult, let alone the strategies to limit them (Spencer et al. pp. 9 and 32). Researching the history about Elder led me to understand the differences between what happened in the past and how these narratives are told and retold, that is re/presented, over time.<sup>38</sup> Some ‘things’ are not as palatable as they once were, so are just forgotten, excluded, or rearranged to better suit current understandings and meanings.

Camels had agentic possibilities other than as colonial outback transporters, an outcome not incorporated into the narratives then or now. Historically, camels were an important resource and Elder extracted wealth from and through them. Today they are a feral pest that impact ‘values.’ This perspective underlines Whatmore’s contention of histories as *human histories* that relegate other matters / materials to “so much putty in our hands” (2014, p. 80). The categories implemented never seem to stretch far from “putty” or “impacts” to allow more agentic possibilities for all matter into historical narratives (in these cases). Spencer’s 2008 report contends that not only do we *not* have a good metric to find out how many pests the continent holds; the report does not offer a remedy to those already extant. However, the report does call for more research into possible human interventions (Spencer et.al. 2008, p. 34). Humans, having instigated the problem, are now responsible for the remedy where, “the source of blame is also the force of intervention” (Chiew 2015, p. 4).

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<sup>38</sup> For example, during fieldwork Elder’s entanglement was an unknown unknown to me, but revisiting Adelaide Zoo websites during writing, reveals ‘additional’ history. The website states “*Did you know:* Sir Thomas Elder is notable for introducing camels to Australia, importing 120 from India in 1866” (ZoosSA). The answer, on my part, was ‘No. I didn’t know *then.*’ It was agnobiological. I didn’t know what I didn’t know, or needed to know, or should’ve known. If I re-research this field, I’ll ask why this was placed so ‘flippantly’ (my categorisation, I admit) in an educative section of the website, circa 2018.

I took photos and notes during this member's tour, where the Presidential Chain of Office was framed on the boardroom wall. Looking over these recently, I noted now what I had missed on that occasion in 2013; the last four presidents are not represented on the chain, and the last president listed in the frame, Associate Professor Robert G Morrison did not have a chosen animal emblem shown. Was I now witness to a once honoured ritual, with ceremonial objects, human choices and presidential dignity, which has become a defunct matter? Or is / was it something less singular and more prosaic that these emblems are consigned to obscure placement in the Society's boardroom?



Image 16: The Presidential Chain.

This example of the past's representations altering to a point where I do not comprehend the non-continuance returns me to the opening of the zoo back in 1883. Rix (1978) states that the zoo opened on the 25<sup>th</sup> April 1883, which is contradicted on Zoos SA website, which states, "Adelaide Zoo opened to the public on 23 May, 1883" (ZoosSA). Rix's dating of the opening must not have been for 'the public,' but a cohort of elite peers, Presidents of the Board, Board Members and Members of Parliament. Way and Elder would sit comfortably in these elite categories, and both went on to be memorialised in 'named places' throughout the state (Elder Park, Sir Samuel Way Building etc.). Elder and Way were more 'probable' candidates for April opening invitees, rather than May opening date invitees when the 'public' would have gained entry <sup>39</sup> 'Acclimatising', it

<sup>39</sup> To confuse the opening date once again the *Zoo Times* magazine (March 2013) states "Adelaide Zoo was opened on 23 July 1883 by the Governor, Sir William Robinson" (McAlister 2013, p. 25). I think the author mixed or transposed the 23 July date from the original meeting in 1878 that was the "genesis" of the Society, as documented within the same article.

seemed to me, to the British class system in the southern hemisphere, was well under way.

### **Fish, birds and mammals; acclimatisation outcomes**

Historically, another act of acclimatising is described in Sumerling (2011) in her work on the Adelaide parklands, as she describes the building of a weir to create a lake from the ‘Torrens’ stream upon which Colonel Light placed the city, and alongside which the zoo still stands. Fishing was encouraged and subsequently licensed. Therefore by 1881,

142 licensed vessels were on the lake.... Mr Minchin, the secretary of the Acclimatization Society (precursor to the Adelaide Zoo), had responsibility for emptying fish stock into the lake for fishing by licensed anglers. (Sumerling 2011, p. 42)

Another Society acclimatisation is the introduction, in the late 1870s, of the common or European starling (*Sturnus vulgaris*), “by the South Australian Acclimatisation Society because they were presumed to be useful insect pest destroyers” (Daniels & Tait 2005, p. 115).<sup>40</sup> Indigenous animals were made extinct by foreign incursions, which included the category ‘mammals,’ when, between “1902-1931, 12 native species were officially recorded as extinct [including the] tammar wallaby (*Macropus eugenii*)” (Daniels & Tait, p. 140). This latter extinction was presumed the result of “predation by the introduced Red Fox *Vulpes Vulpes*, hunting and land clearance” (Burbridge & Woinarski 2016). This particular wallaby has, however, returned from extinction due to the predilection of colonisers for transporting exotic others to distant places, and the historical narrative about this act features in volunteer guides *Wildlife Walkabout Tour* notes.

These notes inform guides that a South Australian Governor, Sir George Grey <sup>41</sup>, took mainland Tammar Wallabies to New Zealand in 1841 (ZoosSA 2011f, p. 5-6 Section One). The wallabies “became a pest there and were due to be culled.... In 2003 85 animals from Kawau Island in New Zealand [were] brought to Monarto Zoo” (*ibid.*). Since these returns, the Society has bred over one hundred Tammar Wallabies and released them at various sites around the state. They were also utilised, at one stage, in the cross-fostering

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<sup>40</sup> Presumably the ‘destroyers’ reference was then to the currently ubiquitous starling and *not* the Society.

<sup>41</sup> Grey was Governor of South Australia from 15<sup>th</sup> May 1841 - 25<sup>th</sup> October 1845 <http://www.governor.sa.gov.au/node/19>

surrogacy of Brush Tailed Rock Wallabies. However, to ensure Tammar wallabies' survival requires the continual baiting of foxes. This occurs on the mainland where these wallabies have been reintroduced by the Society (amongst other re-introducers) and on Kangaroo Island.

Image 17: (Mainland)  
Tammar Wallaby (ZoosSA  
2015)



The International Union for the Conservation of Nature (IUCN) website refers to this practice and the ongoing energies required to ‘maintain’ these wallabies.

The Tammar is present in most of Kangaroo Island’s National Parks and Reserves. Destruction permits may be issued to landholders on Kangaroo Island where the species can impact on agriculture. The South Australian Department of Environment, Water and Natural Resources manages Innes National Park and its reintroduced Tammar subpopulation. The whole park is fox-baited monthly. (Burbridge & Woinarski 2016)

Killing life forms to save life forms is an accepted occurrence in conservation strategies, so that not only can you kill the ‘feral’ species so as to allow the indigenous to live, you can kill the reintroduced indigenous when agriculture is impacted. This is Whatmore’s “material transformations or the changing meaning of ‘nature” (2014, p. 80). The matter/s of a conservation strategy — saving Tammars — is re/represented (changed meaning of nature) to best fit the needs of humans, which means “destruction” of the Tammar by



agriculturalists. Nature is once again thought of as, “putty in our hands” (Whatmore 2014, p. 80). One dissenting perspective comes from animal liberationists who question the ethicality of the baiting toxins used to kill feral foxes.<sup>42</sup>

In my past / present / future ‘time-knot’ with Tammar Wallabies they were considered pests in New Zealand and a conservation success story for the Society. They were killable in more than one context and saveable in another.

Foucault’s **biopolitics** (a coinage in-between bio(life) and politics) can be described in an axiomatic way as **“make live and let die.”** With necropolitics we can on the other side precisely define the transformation of regulation of life within extreme conditions produced by capital. Necropolitics is a coinage in-between necro (DEATH) and politics. Necropolitics regulates life through the perspective of death, therefore transforming life in a mere existence below every life minimum. I defined **necropolitics as “let live and make die.”** (Gržinić 2013, pp. 11, Original emphasis)

By following the IUCN guidelines, foxes die to let wallabies live and wallabies die to let live the products of agriculture. In New Zealand, governance bodies had decided to make wallabies die to let *their* indigenous species live. These demonstrations of necropolitics, a ‘let live and make die’ control, are governance over other life form’s emergences where death *becomes* normative.

Furthermore, according to animal liberationists, foxes (and other life forms that consume the baits) are at risk of extensive suffering in their ‘baited’ deaths while the problem of habitat loss and deforestation remains largely unaddressed (Pearson 2003). It matter/s how nature is conceived and measured according to Reed (2017), because even within attempts by westerns to perceive relationships with Other, schisms still emerge.

Reed examines animal rights activists and compares them to environmentalists working within the same spacetime of Scotland’s animal sporting estates (2017, p. 80). The

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<sup>42</sup> The deaths are long and unpleasant, and many other life forms may eat the bait and also painfully die, including pets, indigenous life forms, and insects as secondary consumers. This refers to the possibility of ‘flow on’ baiting with re/consumption of a previous consumer, or of eating by a second or third consumer of vomited up bait.  
[https://www.animal-lib.org.au/new/hawkesbury\\_1080/](https://www.animal-lib.org.au/new/hawkesbury_1080/)

activists insist that human useages of earth Others for our purposes is outside any claims to morality. This Reed argues, “ultimately restricts which connections matter, a fact that also reinforces the division with environmentalism” (2017, p. 79). Animal rights activists and environmentalists construct ‘nature’ by ranking nature differently. *Individual* earth Others rank highest for animal rights activists, while environmentalists place *populations* and *eco-species groupings* as higher-ranked. The killing and suffering of Scotland’s animals is *the* fight for animal activists, whereas culling to manage discrete populations is acceptable to environmentalist / conservationists (Reed 2017, p. 79). This alternate categorical nature-thinking results in numerous incompatible ethics, where both activisms account for their ethics but are not responsive to the relations-in-totality. The Scot conservationists and animal rights activists both rank nature because they are thinking within the limits of western humanism.

These governance regimes — IUCN, Animal Rights environemntalists and conservationists — have evolved over time, and my delving into these histories brought forth all of these let live / make die matters. However, I found that global matterings were a part of the zoo’s beginnings, and early 20<sup>th</sup> century reproductions, as well.

### **‘Naming’ additions and removals**

Adelaide Zoo became part of an early network of global trade in ‘exotic’ animals, where purchases from circuses, other zoos (Australian and International), and gifting by patrons (rich and / or royal), created for the colony both pride and elitism, with “a local experience of global nature” (Anderson 1995, p. 282). Patronages were sought to embellish the Society’s local standing.

In 1937, to celebrate the society’s Diamond Jubilee, King George VI granted the society a Royal Charter and with it came the right to use the prefix ‘Royal’. At this time the opportunity was taken to remove ‘Acclimatisation’ and we became ‘The Royal Zoological Society of South Australia.’ (ZoosSA)

The elaborate paperwork, declaring this addition to the Society’s name, hangs in the Boardroom, upstairs in Minchin House, which I photographed on the same tour where the presidential chain took my notice.

A few decades after becoming the *Royal Society*, the zoo began experimenting with more material adjustments to its image and aligned itself with what Grazian calls “nature making” (2012, p. 548). This was in reaction to a plenitude of paradoxes created through oppositional demands of visual appeal versus rational responses. Emergent were cages of concrete and bars mutating into ‘habitat’ exhibits. Zoos were caught in between, “the cultural expectations of audiences; the educational mission of zoos; and the practicalities of managing live animal species” (Grazian 2012, p. 561).

During fieldwork, a half a century later again, one such ‘caught in between’ mattering I noted was a newly elected Society Board President who articulated a questioning perspective on nature making and captivity, and this took me back through the archives to search out the history of the zoo’s pinniped captives (sea lions) and the history of this particular president.

### **Presidents and pinnipeds**

Addressing an Annual General Meeting (AGM), the president began by stating that she was a ‘caring for animals’ person with long-term zoo experience. She then made a comparison to the also-new CEO, who had no zoo experience and had come from an

Image 18: Australian Sea Lion enclosure at Adelaide Zoo *Seal Bay*



administrative and financial background. As a newly incorporated management ‘team’ the president and CEO were focused on captive and capitalism respectively, it seemed to the incoming president. For me, at that time, the comparison highlighted possibilities, but I was unsure exactly about what. From my notes the new president stated,

Since the 1980s I have been passionate about animals and this organisation.... I feel this is the right time; there are people to handle the financial and marketing aspects on this board.... if we *only* had people on the board who went on about the financial aspects...it [zooing] is also about the animal’s issues. (ZoosSA 2012e)

The president elaborated their ‘caring’ perspective utilising the zoo’s mating pair of Australian Sea Lions, asking: “Is it in the best interests of these animals to be in our zoo? If we don’t have them here, what do we replace them with?” (ZoosSA 2012e). She was addressing the problematic of space, time, and matter — a spacetimemattering — as experienced by the life forms within the zoo boundaries *and* the problem of replacing species rarely viewed by the general public. Baradian arguments contend that just pointing out the emplacement of a perspective misses all the mattering involved.

This particular person, who was now the board’s president, was not just situated in that position but rather this person was entangled in many ways about which I (at least) knew very little.

The point is not simply to put the observer or knower back in the world (as if the world were a container and we needed merely to acknowledge our situatedness in it) but to understand and take account of the fact that we too are part of the world’s differential becoming. (Barad 2007, p. 91)

Sitting listening to the new president’s questioning the zoo’s holding of these particular captives at the AGM, embroiled many more tracings than just history, and / or a newly acquired board presidency. My interest was piqued, and the history of the new president’s expertise and the history of the zoo’s aquatic carnivores opened up and became entangled with my posthuman perspective.

I learnt for example that Australian Sea Lions dive up to 100 metres, and as carnivore-pinnipeds they are:

...bottom feeders.... unique to South Australia and Western Australia.... When feeding, male sea lions will travel up to 100km and females up to 70km from their breeding colony. These trips average about 3 days and in that time a sea lion will dive 900-1200 times. (Department of Environment 2014)

They live along Australia's rocky coasts, from Kangaroo Island in South Australia, to just south of Perth, Western Australia; approximately 3000 kilometres of the southern coastline (Department of Environment 2014). As a sub-species they have a current CITES (Convention on International Trade in Endangered Species) status of "vulnerable" (Department of Environment 2014). The volunteer guide notes' state they were nearly "hunted to extinction in the 19<sup>th</sup> and 20<sup>th</sup> century, but are now fully protected" (ZoosSA 2011f, pp. 5-6 Section four).



Image 19: Tasko the male Australian Sea Lion in his zoo exhibit (ZoosSA 2009d).<sup>43</sup>

The zoo, in tandem with a local marine park that maintained more extensive salt-water facilities but closed in the late 1980s, utilised both places to carry out this species work. Between 1965 and 2005 thirty-six captives (many wild-born, orphaned, pups) were kept

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<sup>43</sup> The male Australian Sea Lion's name is spelt either *Tasco* or *Tasko*, and I have referenced the naming following the *reference's* spelling.

and these produced fifteen offspring, of which several were transferred overseas to places including Hong Kong, Japan, and Saudi Arabia (Ling & Guy 2007, p.14). “None of the captive-bred females has been allowed to breed with any of the captive bred males (at any of the institutions) in order to avoid inbreeding” (Ling & Guy 2007, p. 14). In 2007 the zoo expressed ‘delight’ in husbanding this species in the exhibit that still holds them:

It is clear from what is now 40 years experience in keeping this species in captivity that it has adapted well to the captive state. The facilities and husbandry practices are now excellent at all locations and the regular, safe arrival of yet another pup is always a matter of great delight to keepers and the public alike. (Ling & Guy 2007, p. 14)

The Adelaide Zoo ‘Seal Bay’ salt-water pool has a 1.05 metre maximum depth with dimensions of 12 metres by 6.4 metres and is filled with moderately saline water of 8,000 ppm (Smith & Litchfield 2010, p. 107). Added to this habitat reduction were problems with visitors throwing coins into this shallow pool: the male Sea Lion, Tasco, swallowed some of the coins resulting in a coin removal operation (ZoosSA 2011a, pp. 18, Veterinary and Conservation Programs).

The implications of all the matters involved with these captives at this zoo were not discussed in the president’s speech at the AGM. However, an article, written by this president, about zoos holding Australian Sea Lions, concludes:

Many zoos and aquaria house low numbers of any one species, publish little information on enrichment, and are financially unable to provide enclosures approaching the space and complexity of natural pinniped aquatic and terrestrial environments. (Smith & Litchfield 2010, p.120)

President Litchfield has a PhD in Psychology (Animal Behaviour) (ZoosSA 2013a, p. 8). Under a TEDx YouTube video she gave on wilderness / primate relations, a short biography states:

Carla Litchfield is a scientist, an animal behaviourist / primatologist / behavioural ecologist / conservation psychologist (she says you can’t pigeonhole her!), who is

passionate about animals, especially our closest living relatives — chimpanzees. She is also a lecturer at UniSA as well as the Vice President of Zoos SA. (Litchfield 2010)

Her narratives, on financial limitations and enclosure limitations do not concur with the previous zoo narrative of breeding interventions deemed, “a matter of great delight.... [and] excellent.... practices” (Ling & Guy 20007, p. 14). The president was speaking about holding a wide-ranging carnivore with the ability to dive a hundred metres deep so as to feed on bottom dwellers (shellfish; lobsters etc.). The “space and complexity” (Smith & Litchfield 2010, p. 120) of *in situ* habitat for this species was being made present by the newly appointed president: in this instance, Australian Sea Lions were *not* being rendered “up as an object of representation” (Mitchell 1989, p. 231). As a few volunteers offered at various times (and I paraphrase them here), *we cannot provide Sea Lions, especially Australian Sea Lions with their depth of dive, with a ‘real’ experience at this zoo.*

So, the new president was not alone when speaking to the emergence of Australian Sea Lions Ady and Tasko’s “real life in time” (Rose 2004, p. 25). In addition, the transgressions of visitors diminish captives’ lives further.

Visitors may unintentionally lead to the death of an animal by feeding (despite warnings), by tormenting an animal, or by introducing foreign bodies into the enclosure.... Although zoos must contain animals to protect other animals as well as visitors, enclosure design and staff often are driven by the need to protect the animals from the visitors. (Benbow 2004, p. 386)

This exhibit at the zoo exemplifies Mitchell’s insight into the “strange character of the West” (1989, p. 222). The sea lions are western’s “real thing” but objectified as a representation (Mitchell 1989, p. 231) in this *ex situ* spacetime mattering.

Australian Sea Lions, as a species, are a sizeable commitment for a small, financially disadvantaged city zoo, and this new president was speaking a different awareness or comprehension of zooing, an alternate “time-knot” (Chakrabarty 1997 in Rose 2004, p. 25). She was addressing these relations from the perspective of the needs / lives of the

two captives. The primacy of the speech was given to the principle of keeping carnivores in less than optimal conditions for years, if not entire lives. She articulated this as, “we have to bust the myth of the ‘wild’ and treat animals ethically and in respectful ways” (ZoosSA 2012e). The myth of the wild is where the dualism wild / captured or tamed or domesticated, leaves out matters that entangle Other lives, here, zoo lives.

Who better than the president of the board to create a discussion around these subjects? And in the history of the zoo, placing captives’ within a wider remit that questioned the extent to which human interventions could or would provide ‘better’ on the metrics written about (numbers of cohorts; quantifiable, exchangeable data on the species; and *ex situ* replicated *in situ* enclosures), seemed remarkable.<sup>44</sup> Her question came from a thicker knowledge base than most people achieve, and as such, did not just acknowledge the limits of the zoo to keep these species but opened up wider possibilities for understanding ourselves as interventionists without complete knowledge and control. Historically, this other perspective matters as it stands in contra-distinction to most of what was / is culturally normative.<sup>45</sup>

### **Chief Executive and giraffes**

Later, the newly appointed CEO also addressed the challenges — present, past and future — of zooing, when Marius the Giraffe was euthanized and publicly fed to fellow predator captives at Copenhagen Zoo: another zoo event that triggered an avalanche of global ‘news.’ In a weekly internal newsletter, the CEO provided a link to a *Scientific American* article about this particular giraffe and its demise, which she stated was an:

...interesting discussion around some of the dilemmas and ethical considerations....  
Over the last week there has been worldwide interest in the euthanasia of a giraffe at Copenhagen Zoo. This has attracted interest in many arenas and particularly on social media. On the Zoos SA website and Facebook questions were asked about the practices in Australia. (ZoosSA 2014b)

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<sup>44</sup> This President vacated the position after a year, citing professional reasons. The Sea Lion enclosure is still extant as of time of writing in 2019.

<sup>45</sup> A petition called *Move the Australian Sea Lions ‘Ady & Tasco’ to a bigger enclosure* appeared on [www.change.org](http://www.change.org) in 2017 and was reopened in 2018 after no changes occurred.



This killing-death had initiated a heated ethical debate, not least because of the willingness of the Danes to publicly follow through on their chosen path. They would not demur from publicly shooting, butchering, and feeding Marius to the zoo's carnivores even though there were offers of zoo placements for the young giraffe. The Adelaide Zoo's CEO linked article, in *Scientific American* (Goldman 2014), summed up the dilemma thus,

No natural ecosystem can support an infinitely increasing population any more than the artificial ecosystem created by a network of zoos, and without the selective pressure offered by predation, starvation, or drought, zoos must restrict population growth by other means. (Goldman 2014)

Limits on the energy at a zoo's disposal in keeping captives include the 'collateral processes' of species spatial, relational, and ongoing maintenance costs — the spacetime-mattering of zooing. Zoos attempt to replicate the wild as a front of house mediation between the ideal and the real, but the reality of limited 'human' energy remains. Zoos are human-emergent manipulated places and not home-habitat affordances. Humans manipulate matter but not to the extent / scale of universal matter/s. In other words, humans have agentic capacities that simply do not measure up to the universe's agentic capacity, which seems facile to state but apparently needs pointing out. The giraffes keep *becoming* but the zoo require a *being* for all the categories the organization must fulfil: to represent the species, and / or to fill a missing part of the collection so as to be a diverse collection or to replace an 'icon', to breed for genetic or regional purposes, to gain corporate sponsorship, attract visitors, and in general remain a viable 'zoo.'

The article referred to the selective pressure offered by 'predation, starvation or drought,' which is a reference to *in situ* matters when zoos are *ex situ* places. There are, of course, many more categories that could be added to the *in situ* list, habitat loss, poaching, and genetic isolation, for example. Barad argues that "responsibility must be thought of in terms of what matters and what is excluded from mattering" (Barad 2007, p. 220). Humans have removed animates from 'home' habitats, although most zoo residents are bred in captivity today. Captives emerge into the affordances of human manufactured spaces however, whether *in* or *ex situ* born, and are fed, bred, transferred / swapped, housed and medically treated, to criteria that include availability, cost, time,

knowledge and other administrative accountabilities. Zooing, as practiced today, does not take Bohr's comprehension of the metrics used to work out practices as *one* phenomenon. Choosing different categories to represent what or how people are zooing, means colliding with the expectations raised by previous or concurrent representations. As Barad explains when theory and practice are one: "Measurement practices are an ineliminable part of the results obtained.... Bohr's ... philosophy-physics undermines representationalism" (2007, pp. 121, 123).

The result for Marius the giraffe, and zoo captives in general, are captives living *ex situ* existences adapted to *in situ* affordances, a perspective the CEO alluded to in linking to the Goldman (2014) piece. Many zoo narratives led me to past-present-futures and *in / ex situ* places, which I found to be a way of historically experiencing, and coming to better understand, my field.

### **Conclusion**

This chapter has shown that entanglements of the past resonate in, and entangle, current matters. Descendants of Elder's camels, for instance, *could* be captives at the zoo, but instead, they thrive in the freedom of their feral, continent-encroaching, outback occupancy. They once represented colonising, profitable, desert-haulage animals, but have now become an environmental, and thus expensive, problem. Their prime importer has remained, however, an esteemed bastion of past zoo benevolence. As I pivoted from a humanist, western, perspective to a posthuman comprehension of my own culture, the history of the zoo kept emerging in narratives like these.

In following up histories I knew nothing about at all, from bird penises to Great Exhibitions, elisions and entanglements both current and historical, realigned matters and altered meanings. The wests "strange character" (Mitchell 1989, p. 222) of objectification, where we want to be 'there' yet 'not there' remains from early Exhibitions to the 'best practices' present, it seems. Some matters are / were seemingly forgotten, although present; the Presidential Chain of Office, for example, framed and placed on the Society's boardroom wall. This chain, which depicts a chosen animal, moulded onto metal and designated as a 'medal' on an elaborate chain, now doesn't (seem to) matter, or matters less, or has fallen out of mattering into forgotten, not followed anymore, history, or, some

other 'thing' about which I know nothing. Today, interventions into Other life forms emergence display "necropolitics," where the progress measured is dependent upon human manipulations to "let live and make die" (Gržinić 2013, p. 11). These powers, to manipulate or intervene upon other life forms, connect to the zoo's particular representation of nature at different spacetime matters. These became *my* fieldwork "time knots" (Chakrabarty 1997 in Rose 2004, p. 25), as I took my non-linear fieldwork journey, where history, as the zoo's spacetime mattering, entangled my own.

In chapter four, I utilise Plumwood (1993), to unentangle several of the processes and practices in western thinking that results in such puzzling emergences.

## *A view of the zoo from the master perspective*

...delusions of being *ecologically invulnerable*,  
beyond animality and ‘outside nature’  
lead to the failure to understand our ecological identities  
and dependencies on nature.  
(Plumwood 2009, pp. 117, Original emphasis)

### **Introduction**

This chapter explores the built environs of the Adelaide Zoo (the zoo hereafter), past and present. In particular it looks at bears and their affordances within the zoo by utilising the five features of Plumwood (1993), which reveal how the master narration of our culture emerges (pp. 48-55). I consider and utilise these features, in detail, throughout this chapter in regard to captives bears and their enclosures.

Image 20: Elephant House built in 1900.



Captive enclosures in general have evolved during the zoo’s 130-year history, with some of the early buildings still standing and utilised in alternate ways today. For example, historically “the big, ...pretty and... easy to see” (Osborne 2013) life forms, including

elephants, hippos and “polar bears, were ... given special houses to reflect their elite status in the zoo universe” (Anderson 1995, p. 282). One such ‘house’ is the small, Indian themed, Elephant House, built / opened, according to the date moulded into one wall, in 1900, which now works as an open-air museum with glass cased specimens of long deceased inhabitants.

For example, there are the leg bones, clavicle and skull of a giraffe that lived and died at Monarto Zoo (MZ), while near the original bars that run the length of one wall and face towards passing visitors, an old elephant harness stands testament to many visitors' memories (including my own) of rides on a wagon behind a lumbering captive. People take photographs of their children 'behind bars' at this once-upon-a-time elephant home. Some visitors sit on the ledge outside, leaning back against these bars, to rest, eat and chat.



Image 21: Inside the Elephant House museum with elephants' harness outlined against the bars

Down the pathway, the old Hippo House is now the leaf house, where browse is stored for the day's herbivore meals. On the outside, the original artwork of an Egyptian Goose and its round eggs has been refurbished and painted. Another old exhibit stands near the current Giraffe House and is a port of call during guide training. This exhibit is the original Polar Bear pit, and is depicted on the 1883 map of the zoo (Rix 1978, p. 8).<sup>46</sup> Still standing today are adjoining rooms of thick concrete, windowless-walls that abut the outside pit. There is one crawl through space inside. This narrow opening gave access for the keepers who attended the captive bears, the last of which occupied the space until the 1990s.

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<sup>46</sup> See page 72 this document for the Rix Map.

Trainees are told crawling into and out of this space had been a ‘dicey’ proposition for keepers, as bears are more attuned to four ‘feet’ on the ground than bi-pedal humans. The bears were not always accommodating and would go inside the room, even as they were offered treats and enticements to stay outside. This happened just as keepers were attempting to gain entry to the bear night-quarters through the limited crawl space. To *lock out* the bears meant accessing the inside rooms via the crawl space. This is, obviously, not a well-formulated build. However, as will be seen from later zoo attempts at ‘habitat’ creation, errors *are* made.



Image 22: The Bear Pit dipping pool with adjoining concrete rooms.

Outside, the bear pit has a small dipping pool (now empty) and a trench below the viewing wall. The concrete was painted white, to imitate the *look* of Artic conditions, which is the icy hemisphere of ‘wild’ Polar Bears. One volunteer trainer offered his thoughts on this pit, to a group of new recruits.

In *our* summer, I shudder to think of the Polar Bears in there.

During an average Adelaide summer, where temperatures often rise above 37<sup>0</sup> C (100<sup>0</sup> F) during the day and remain in the high 20<sup>0</sup> C (70<sup>0</sup> F) at night, and can remain so for days on end, this ‘representation’ of habitat — a white painted concrete wall — must have proven less than ideal for the Polar Bear inhabitants. Visitors would peer down onto the inhabitants with uninterrupted views of these exotic beasts pacing their small, painted, concrete home.

Today, the bear pit is signposted (and narrated to guide trainees) as a place of the past and is offered as the *nadir* of past zoo keeping practices. In the volunteer tour notes it is referred to as the “Old Polar Bear Cage” (ZoosSA 2011f, p. 6 Section Two). The word ‘cage’ is considered an anachronistic referent and is heavily policed by fellow guides in usages, other than this particular place. Exhibit or enclosures are the preferred categorisations for captive confines. The bear pit at this zoo represents a place and time of a distant, ill-informed past, which highlights the progress and control of current practices.

At the zoo, the historical contexts — and the motifs, built environs and narratives which signify the context — of instrumentalities of the past are recognised, valorised, contemplated, disputed, but at some level, they are accepted and publicised in various forms, as part of the history of this small, urban, space. They recycle the built past to instrumentalise them for *today’s* narrative. During fieldwork, the bear pit fell into one of these instrumentalities. It stands testament to the changing context, but not intent, of animal-human relations. I shall return to the bear pit later and compare it to a current bear enclosure in *Bear Pit and the Panda Forest instrumentality*.

### **Arrangement of chapter**

In this chapter I begin with an examination of Val Plumwood’s view of our particular *western* humanity, and her theory that for those “earth others” (1993, p. 137) categorised by westerns as less than human, utility rules. That is, Other life forms are instrumentalised for the purpose of human gratification, although *which* gratification is being fulfilled is the context where human and Other entangle. Westerns have venerated for three millennia the precepts of particular ancient Greeks and these ancient philosophies wend through Abrahamic monotheism and secular Enlightenment to our current market world

of rational, neo-liberalist, individualism. These precepts reproduce a master narrative of separation and domination (Plumwood 1993, p. 5).<sup>47</sup>

Plumwood (1993) explores five mechanisms — instrumentalism, incorporation, backgrounding, homogenisation and radical exclusion — to explain how this domination or separation of earth Others works, and I employ these throughout this chapter (and as a guide in the headings) to underscore and make clear the norms of western thinking.<sup>48</sup> Beginning with a comparison of the zoos early 20<sup>th</sup> century humanist representations of bear exhibits to the latest build for this species, I examine the constancy of the humanist message and the captivity of the species — their instrumentality — as each traverse the changing cultural expectations of this once colonial, now market-world, space. Then, an examination of human practices, represented as ‘best’ in exhibit builds at the zoo where the metrics of best practice design — what is acknowledged or absented as a requirement for an earth Other — is explored. The metrics examined include rights, imitation builds, biotic technologies, and the scaling of these incorporations into human requirements. These global zoo phenomena emerged to better incorporate, into a progressive narrative, zoo-species. Next, the denials that contradict and confuse management narratives being employed to promote Giant Panda experiences at the zoo, where local conditions, including traffic, weather, visitors, volunteers and the exhibit build, are backgrounded or juggled, to make coherent a contradictory narrative, albeit not always successfully. Then, I make an exploration of the formal categories of humanist zoo-thinking, where holding still the category ‘Giant Panda’ is the only way to justify the manipulated conditions of captivity; their homogenisation. As an earth Other, the bears emerge in the affordances in which they live; yet stasis is enforced upon the living bears. Finally, and expanding upon this captive-stasis, I examine how the behaviour of Fu Ni (the female) and Wang Wang (pronounced Wong Wong) is re-narrated / presented to best fit the requirements of

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<sup>47</sup> “Much feminist theory has detected a masculine presence in the officially gender-neutral concept of reason. In contrast, my account suggests that it is not a masculine identity pure and simple, but the multiple, complex cultural identity of the master formed in the context of class, race, species, and gender domination, which is at issue. This cultural identity has framed the dominant concepts of western thought, especially those of reason and nature” (Plumwood 1993, p.5).

<sup>48</sup> “A dualism is more than a relation of dichotomy, difference, or non-identity, and more than a simple hierarchical relationship...Dualism is a relation of separation and domination inscribed and naturalised in culture...which treats the division as part of the natures of beings construed not merely as different but as belonging to radically different orders or kinds, and hence as not open to change” (Plumwood 1993, pp. 47-48).



zooing. That is, the human interventions — Plumwood’s radical exclusion mechanism — that keep the pandas ‘Panda.’

To clarify a problem with critiquing humanism through a posthuman lens, I want to point out that although the section headings denote the five “features” (1993, p.48) that Plumwood expands upon to explain her perspective, it will become clear how entangled these mechanisms’ are — with each other and with all the matters of zoo — and thus how co-dependent humanism is on earth Others and other matter/s to become our master narrative. A posthuman perspective is not a polarising perspective, rather it is an incorporating one. That is, posthumanism is a responsive call, to “recognise both kinship and difference; that is, mutuality” (Plumwood 1993, p.157).

### **Val Plumwood’s theoretical perspective**

Val Plumwood, as an eco-feminist and philosopher, focuses on the underlying assumptions of western culture that, she argues, have created a connected, dominant, dualistic, ‘master’ narrative that polarises reason against nature. For millennia westerns (defined variously as European empires / Occidentals / Judaic initiated monotheists / enlightenment secularists / liberal capitalists / humanists) have promulgated and profited by a domination story, or a “master identity / model / perspective” (Plumwood 1993, pp. 5, 23, 65) based upon an enduring, seemingly ineradicable, dualism. She asserts that the, “continual and cumulative overcoming of the domain of nature by reason engenders the western concept of progress and development” (Plumwood 1993, p. 3).

Furthermore, supremacy over nature also creates the ‘isms’ of class, race, and species (Plumwood 1993, p. 5). By eschewing masculine in favour of master, she wants to highlight that more than gender relations need to be explored (Plumwood 1993, p. 5).

To the master, residing at what he takes to be the centre, differences among those of lesser status at the periphery are of little interest or importance, and might undermine comfortable stereotypes of superiority. (Plumwood 1993, p. 54)

The outcomes of this normative master narration can mean its ‘rationality’ is questionable, which emerges within the lives captured within its irrationality, as can be perceived at the zoo. Here, “problems of remoteness from consequences and knowledge

they generate can adversely affect... political and especially ...ecological rationality” (Plumwood 2006, p. 118).

Plumwood begins in ancient Greece, where the philosophical separation of humans from nature created a super-separation that has cascaded through numerous variations for 3000 years, re-inventing or re-contextualising boundaries and values’ resulting in the continuous split of humans from all else that exists (Plumwood 1993, pp. 192-195). A refusal to accept human dependency on the nature it Others, absents this basic understanding of reality from the Western worldview (Plumwood 1993, p. 194; *c.f.* Said 1978). Weighting this version of rational thought against nature denies human dependency upon all else that exists (nature) and yields an aberrant version of reason that subordinates ecological mutuality, where mutuality “acknowledges both continuity and difference” (Plumwood 1993, p. 163). “Because it has not fully come to terms with earthian existence, but clings to illusions of identity outside nature, the master rationality is unable to grasp its peril” (Plumwood 1993, p. 194).

Further, by positing “cultural universalism,” where *western* understandings signify *human* understanding, the master rationality deflects political critique away from westerns and dualistic thinking, and onto the general mass of humanity (Plumwood 1993, p. 11).

(T)he gendered character of nature / culture dualism, and of the whole web of other dualisms interconnected with it, is not a feature of human thought or culture *per se*, and does not relate the universal man to the universal woman; it is specifically a feature of *western* thought. (Plumwood 1993, pp. 11, Original emphasis)

Within western collectives, dualism’s resultant hierarchies are also universalised as ‘natural’ orders, currently based upon the assumption of the reason / nature dualism. “Dualisms are not just freefloating systems of ideas; they are closely associated with domination and accumulation, and are their major cultural expressions and justifications” (Plumwood 1993, p. 42). Plumwood argues historically, and continually, western dualism serves as fodder for emergent concepts that diffract the old and new exclusions and oppressions into current forms of hierarchy.

This evolving emergence accrues a depth of ‘exclusive’ resources with which to exclude and / or oppress materialising matter/s. It develops as colonisation through the logics of merit — a divide and conquest hierarchy where all the positives accrue dependent on the master’s ranking choice. The mechanisms for the continuous extant domination of reason over nature, the colonisation of earth and all its Others, are now *briefly* defined.

Instrumentalism, or objectification, is the usage of an earth other, “which treats it as entirely a means to another’s ends, as one whose being creates no limits on use and which can be entirely shaped to ends not its own” (Plumwood 1993, p. 142). The classifying of extreme differences between beings in dualism results in benefits to the master rationality through denial and extreme utilisation of Other, where difference and similarities are juxtaposed to best affect in concretising and / or absencing boundaries. “Through instrumentalism and incorporation the dominant culture comes to frame its conceptual approach to this sustaining other entirely in terms of its own needs, treating it as an infinitely manipulable and inexhaustible resource” (Plumwood 1993, p. 194). Incorporation denies the autonomy of other and therefore posits Other as usable and scalable, by superior, reasoning beings. Backgrounding, results from a denial of dependence on Other, whilst using and benefiting from that Other’s energies. It is a disowning of the reliance *without* which the master would struggle to function but *with* which domination is achieved. It is a denial of connection (Plumwood 1993. p. 48). Homogenisation or stereotyping results in the Other as assumed to be bound and constant in their lesser status (p. 53). “The colonised is reduced to a function, and the relationship of domination destroys the ability to perceive or appreciate characteristics of the other over and above those which serve this function” (Plumwood 1993, p. 55). Lastly, radical exclusion or “hyperseparation” results from the need to differentiate beyond mere difference to complete “earth other” (Plumwood 1993, p. 142).

During my zoo experience, the space emerged as both an example of the western domination narrative and a resistant, insistent voice against master manipulations. The intimacy of lives lived proximally with captives, I argue, attunes humans to the possibility of “remaking reason in a different mould from the master mould” (Plumwood 1993, p.195). This remaking is the intention behind Plumwood’s theory, where earth others share “both continuity and difference” in their emergent becomings (Plumwood 1993, p.

163). Eurowesterns or Westerns / occidentals / moderns / enlightened quasi-Europeans are, in Plumwood's terminology, "everywhere in chains [due to] ... our own cultural bondage to the logic of the master" (1993, p. 190). The zoo is no exception.

### **Bear Pit and the Panda Forest *instrumentality***

The bear pit and its once-upon-a-time occupants is a contrast between the master narrative of one hundred years ago and the current 21<sup>st</sup> century 'bear' version. In contrasting how far zoos have journeyed away from primitive, 'cruel' unthinking practices the numerous bears of yesteryear and the Giant Pandas of today are instrumentalised through a denial of current bear manipulations being an equivalence to yesteryears. The zoo compares (obliquely) the Panda Forest enclosure with the 19<sup>th</sup> century bear pit to express human progress in the category of human / Other relations. In a built environment this comparison denotes 'rational' development, with resultant improved humane values. Although, as Anderson's quote signifies, in the past large exotic captives, including "polar bears, were ... given special houses to reflect their elite status in the zoo universe" (1995, p. 282). The bear pit represented the same value to the zoo in *its* beginning as the Panda Forest does today; an elite home for a prized captive.

A group of trainee-volunteers stood looking down into the bear-pit on a tour of the zoo, and were informed by their trainer, Maya, that,

In 1985 this area was re-landscaped, and in 1995 it was closed. Since it was built, it has housed every one of the eight surviving species of bear in the world, from 1940 onwards.

One such exotic captive, which was deemed unusual or unique through being only extant in the northern hemisphere icecap / Arctic, were Polar Bears. Some human, working in the 'wild animate' marketplace, managed to capture, contain, and send to Adelaide Zoo, this creature for display. Mullin & Marvin (1999) argue that wild, in this interpretation, requires its polarised opposite of domesticated, with the concomitant possibility of thrill / danger (p. 2 and 4).

(W)ild ... is a cultural category rather than a zoological classification ... the only qualities which wild animals share is that they have not been domesticated, bred for food, for work or as pets. (Mullan & Marvin 1999, p. 2)

Marked as wild-exotic due to being a difficult captive for humans to capture, control, and keep, Polar Bears were considered a good attraction: “attendances broke records” (Rix 1978, p. 187). A hundred years ago the zoo marked this exceptionality by building a special Polar Bear enclosure. Today these types of enclosure are considered a ‘cage,’ with concrete floors, walls and deep moats. The guide tour notes state the:

...old polar bear cage is visible and it is a good example of the ‘old’ style of zoo when the mental and physical state of animals was not a high priority. The last polar bear displayed at AZ was in 1992. (ZoosSA 2011f, p. 6 Section Two)

Comparing its presentation to the visiting public — then and now — diffracts the past through the present so as to reveal human exceptionalism evolving. There are, however, other matters to consider in this historical comparison. For example, a life lived in a pit that is whitewashed to represent ice, in a temperate zone, creates a human emotional response (as well as an unknown captive one), even a century later.

(T)here is something deeply unsettling about reducing private moments of utter aversiveness and violence into ordinary objects to be looked at. Scenes of suffering and violence should never be targets of curiosity and gaze, simply because they are private and should never have happened. And as for ourselves, to look at them means that something very fundamental may be missing from our morality or even humanity. (Aaltolla 2014, p. 22)

Aaltolla (2014) is investigating the ethics of ‘advocacy imagery,’ as employed by animal rights groups (p. 23). She concludes that ethics, moored to context, justifies using images of suffering, and that such imagery is a ‘scarce’, yet emotionally laden, resource (Aaltolla 2014, p. 29). When this resource is utilised for arguing against the normalised, concretised instrumentalisations of Other, it can be a successful one. This reasoning allows images, or in the case of the once again viewable bear pit at the zoo, to make

visible / perceptible, that which has become erased / absent in the general culture; in Plumwood's terminology, what has been 'backgrounded.'

However, Aaltolla (2014) is attempting to justify 'advocacy imagery' usage to disallow further current suffering, while the zoo utilises the bear pit as a viewable once-upon-a-time sufferance to demonstrate a more compassionate human instrumentality today, albeit by the same organisation that perpetrated the original sufferance. The zoo moors the context of time — here is human control then and now — to a space that once perpetrated captive suffering and now stands empty — as testament to zoos' evolving ethics.

Bears are still held captive here, only now the bears are Giant Pandas and the enclosure in which they are presented is an air-conditioned, larger than 'normal,' well watered, shaded, designed space: another elite space in another (deemed to be) progressive spacetime. So, the reasoning of human progress-control remains constant while the context has been changed to fit the narrative being composed. The zoo links into a western master narration to distance past practices by incorporating the lived experiences of once-upon-a-time captives whose suffering, at the hands of their organisation, is now utilised to enhance current practice. The zoo depends upon people experiencing a pang of remorse, that is, an emotional response, for the past inhabitants so as to perceive the distance between zoo practices, then and now. In Plumwood's lexicon, the Polar Bears of yesteryear are treated as "entirely shaped to ends not its own" (Plumwood 1993, p. 142). Captives for entertainment *then* within a master narration of Empire, colony and humans in control: and (deceased) captives of a master narration *now* that highlights progress through manipulating time and backgrounding the bears of yesteryears' zoo.

In its history, the Adelaide Zoo has been home not only to Polar, but also, Brown (Kodiak & Syrian), Asian & American Black, Malayan Sun, and Syrian ursine captives (Rix 1978, pp. 184-8). After opening their gates in 1883, the Adelaide Zoo:

...recognised the importance of bears as an exhibit .... [and in] less than 10 years four species were in the collection and it was due only to financial limitations that there were not more species.... In all six out of seven species now recognised by most zoologists have been exhibited. (Rix 1978, p. 184)

As stated above, the zoo is now home to another pair of bears, Giant Pandas on loan / lease from China. This Ursidae pair completes the Rix (1978) quota making it seven out of seven of the ‘recognised’ species being exhibited within the zoo since opening, which is still one short of the current quantification of eight extant bears as Maya — see above — and various zoo narratives relate. The ambiguity surrounding ‘recognised by most zoologists’ will be returned to later, but for now, an examination of their Adelaide Zoo built environment will be explored.

Wang Wang and Fu Ni hold pride of place at the zoo as ‘ambassadors’ for their endangered, wild, counterparts in China. Their arrival in 2009 was still an item of discussion during my fieldwork, even though a couple of years had elapsed since the heady days of their arrival. The composite complications of debt, involved with obtaining, exhibiting, and husbanding the bears, together with the loss of land to transform the entrance shopping and office precinct, enmeshed to create unrelenting focus upon the pandas in the wake of the Global Financial Crisis. Further, the ongoing effort by management to defend the expenditure, the choice of species to be thus indulged, the loss of long-term Adelaide Zoo species to Monarto Zoo, with the resultant diminishment of a popular ‘round’ for keepers and volunteers, all complicate the Giant Panda narrative at the zoo.

Their enclosure, named the Giant Panda Forest (ZoosSA 2009a, p. 29) or the Bamboo Forest (ZoosSA 2011a, p. 72) together with a sturdy boundary fence, and entrance shopping precinct upgrade, cost the Society millions of borrowed dollars. In-house calculations foresaw increased attendances and therefore increased income due to keeping these particular bears. Expectations were high prior to the bears arrival, as expressed in the pre-bear annual report:

...due to the Zoo’s increased profile and positive media [member] numbers have continued to grow, a trend no doubt also attributable to the excitement generated by the pending arrival of Giant Pandas. (ZoosSA 2009a, p. 66)

For these bears, the built surrounds were two separated, large, walk through outdoors spaces, attached to front of house, and backstage, air-conditioned rooms, created to mimic

wild habitat. Wild habitat enclosure simulations are requirements for 21<sup>st</sup> century zoos where:

...visually pleasing and sufficiently entertaining exhibits and animal presentations... offer enough scientific realism that they can serve an educational purpose, while simultaneously providing enclosed living quarters for live animal species that maximize their health, comfort, safety, and enrichment. (Grazian 2012, p. 548)

Image 23: Fu Ni up an evergreen tree.



One exterior side is evergreen ‘fir’ themed whilst the other is themed ‘deciduous.’ An open-air, covered pavilion, “the breezeway,” allows people to follow the ambulant bears from outside to inside enclosures. The 2008-9 Annual Report states the, “Pandas, which are coming to Australia to breed as part of a global survival program, will be housed in two best practice exhibits that will simulate their natural habitat” (ZoosSA 2009a). This “best practice’ enclosure is home to an as yet non-breeding pair of Giant Pandas (as of 2019). It is today’s

equivalent of the early nineteenth century Polar Bear “special house” that “reflects elite status in the zoo universe” (Anderson 1995, p. 282). Changes have transpired but humanism and captivity remain constant.

### **Design as *incorporation***

Master rationalism, as an exercise of control and manipulation, asks *what is “best practice” in exhibit design* and answers with a list of habitat facts and categories thought to be appropriate to the species and incorporates the bears through these human metrics. Plumwood argues, “human relations to non-humans are as political as human relations to other humans” (1993, p. 17). The question of best practice assumes human exceptional design skills that can imitate home or ‘natural’ habitat / evolutionary habitat outcomes,



and human ability to interpret meaning for bears. This is a classic case of incorporation, where “the definition of the other [is] in terms of the self’s realm of agency” (Plumwood 1993, p. 155). The zoo’s design and build assumptions express human coding, or quantification — of the desires and needs of bears — over the unknown *in situ* life the bears would have experienced. That is, due to captivity, bears have been denied *in situ* lives and knowledge. It assumes humans are able to know bears and provide for their requirements. The question backgrounds the entanglements of captive lives that have different ways of becoming in different habitats, continuously. In this instance, the bears are a part of the matter of their becoming and not an outcome of it, in that like all life, adaption is a requirement to the surrounding affordances, not an end feature (Hayward 2012, p. 185).

The exhibit design allots the bears certain ‘rights,’ a western category that aids in sorting out disputes between stakeholders, usually humans, but extended to earth Others when relations are under examination.

Rights seem to have acquired an exaggerated importance in ethics as part of the prestige of the public sphere and the masculine, and the emphasis on separation and autonomy, on reason and abstraction. (Plumwood 1993, p. 172)

Relations between the earth Other animals and humans at the zoo invoke these rights, although they are only partially met in favour of the captives. The anti-humanist Ehrenfeld argues that even in human spaces where considerations of Other animates takes precedence, the underlying assumptions of eurowesternism — that is, human control and exceptionalism — “damage...efforts...for saving Nature” (Ehrenfeld 1978, p. 200). Within the rationality of market-world reciprocity, Ehrenfeld argues, “if ... animals are to be considered resources and worthy of being saved, then they must be available for exploitation.” (1978, p. 198). In “best practice” design for example, to attempt to build habitat that goes some way to imitating ‘nature,’ large amounts of energy are required.

We refer to this energy (outside of physics and inside humanities) as human capital: financial, productive, administrative, and so on (myriad categories). Falling short of close imitation has repercussions for captives. As we cannot provide exact replications of home because humans cannot deliver or even know how to reproduce earth Other’s wild habitat

in all of its evolutionary affordances, how do we measure what is ‘best’? Giant Pandas come from diminishing wild habitat, which according to training notes, is most often due to expanding human territories and predation (ZoosSA 2013d, p. 21). This latter information is part of the conservation mantra and appears throughout the volunteer training notes on many species. The former information, that humans cannot replicate wild habitat, is backgrounded amidst attempts to make enclosures look like idealised ‘wild’ habitat where:

...rocks and vegetation may be synthetic replicas designed to provide visitors the impression of a natural environment without the cost or maintenance of the real thing. (Benbow 2000, p. 20)

### **Policing nature through *incorporation***

Our intervention in the panda’s lives has us policing nature (Plumwood 1993, p. 172). For example, humans decide what is ‘wild,’ that is, what is bear habitat, even though humans have circumscribed this ‘range’ or area for centuries and / or millennia. This baseline timeslice of ‘best for the bears’ is a human choice based on human limitations of knowledge, where quantities, “of the richness and complexity — the trophic diversity... was lost before it was recorded. We live in a shadowland, a dim, flattened relic of what there once was” (Monbiot 2014, p. 89). Monbiot (2014) speaks to the range of species lost through human assumptions of domination and argues these losses and subsequent assumptions cascade through today’s ecosystems.

For the zoo’s bears, if and when the best practices are too expensive, the *practices* are arranged and implemented hierarchically to ‘fit’ with human considerations. That is, the bears are assimilated into human wants and requirements, a practice of incorporation that, “corresponds to the totalising denial which denies the other by denying difference, treating the other as a form of the same or self” (Plumwood 1993, p. 155). Incorporating captives into human measurements that attempt to recreate home-habitats based on particular baseline panda spacetime matters absorbs them into *our* priorities. These priorities then cascade through the assumptions, finances, and copious other human matters, another of which is the incorporation of ‘best practice’ in breeding.

Bears, adapted within the affordances of their environment, may have different habitat likes / dislikes, choices or desires in total absence of human progress narratives. Emerging as bear in captivity, that is, with human-cultural-expectations, means pandas emerge differently than they would *in situ*. Panda breeding, for example, is intervention into Panda lives to fulfil human expectations. Choice of mate, desire to do so within this timeframe, are differences between *in situ* breeding and captive breeding. The latter has the added ‘pressures’ of human expectations and all of the energies put into making these come to fruition. For example, the metrics of the zoo ascertaining the female-panda-cycle is an *ex situ* intervention into breeding.<sup>49</sup>

One general media Giant Panda narrative made Mia, a long-time volunteer, bemused and angry.

The Chinese government say that the Panda sanctuaries have to produce 60 offspring annually. So, consequently, they force the pregnancies. That is why they have crèches of young, because they can’t get them back to the forest. And they can’t really send them back to the forest because the females have been born in Wolong as well, so they don’t know how to forage or where to find food. And the young are being sent to zoos around the world. I believe the reason our pandas are not breeding is because we now give them playtime together. In Wolong Sanctuary [the breeding sanctuary in China] — as young pandas — instead of being solitary animals with their *mother* out in the bamboo forest, they crèche them together. Which is very unnatural for pandas and where they learn to play. These two pandas that we have would have been creched as young animals, and possibly have lived communally with others of the same sex until they were sent here. Hence, when they are put together, they play. And even when she is in oestrus for that short period of time, 1-3 days, he just wants to go on playing. He [Wang Wang] hasn’t got it in his head that this is the vital time to mate and reproduce.

The reliance of human perspectives, and the interventions made into a species’ mating habits, baffled and bewildered this volunteer. And one of the vet nurses articulated a

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<sup>49</sup> “The Giant Pandas, Wang Wang and Funi, keep us busy as we amass reproductive samples and measurements to gain baseline data of their cycles (and how these may have changed with a southern hemisphere locale)” (ZoosSA 2011a, p. 18). “Fu Ni was artificially inseminated twice with semen from breeding partner Wang Wang which was of excellent quality and volume” (ZoosSA 2016, p. 19). Also, note the alternate spellings of the female panda’s name. I once asked a staffer how to spell it correctly and was told Fu Ni, but the other spelling still crops up in official media, including in this latter AR in 2016, where she is Funi on page 14 and Fu Ni on page 19 (as referenced above).

similar perspective, stating, we need Wang Wang to get excited by Fu Ni and not sawdust and bubbles.<sup>50</sup>

The development of zoo ‘captive breeding’ programmes was a branding alteration or change of purpose, according to (2012), who investigated this shift along with their 20<sup>th</sup> century adoptive posture of education and conservation. Bayma refers to captive breeding as a “rational myth” taken up within zoos because this ability offers “potential justification for zoos’ existence in the face of external criticism” (2012, p. 119). Captive breeding fulfils the master narration by incorporating the Other (captives) as breeders unable to breed in the wild and therefore requiring human assistance through our technoknowledge and procedures, that is, our *techne*. Rational myths have numerous organisational meanings including constructing solidarity, cooperation and framing goals, as well as being a plan for success (Bayma 2012, p 118). Functionally, rational myths “explains the social practices of a group.... [while also being a] deliberate tool and unexamined institutional belief” (Bayma 2012, p. 118). Mia did examine official and media narratives and came to vastly different conclusions to the official versions:

And there is that silly story about the panda keepers from Wolong dressing up in Pandas suits and taking the babies out and putting them in the forest and then going out in their panda suits, to see how the babies are going.

Panda suited Chinese panda-carers appeared in local and national media representations at this time.<sup>51</sup> The Head of Conservation, Zoos SA, travelling in China with the organisation’s newly installed CEO, also referred to this panda-suit practice. In particular, the release of a Chinese bred Giant Panda, Tao Tao, elicited this information:

Last week Tao Tao was released to the wild and has been settling in well, even running away when people approach, which is fantastic news. A lot of work was put into making sure Tao Tao didn’t become familiar with people whilst in captivity, to the extent that the release was the first time he saw a human, before then the only

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<sup>50</sup> I wondered what this meant at the time. Subsequently, on a PowerPoint presentation giving a description of Wang Wang with categories including Birth date, Weight etc. there is a description under Likes that states “Wading in his pool, Catching, playing and cuddling pigeons, A tyre to play with, rolling in sawdust and scented bubbles” (ZoosSA 2013f, p. 3). Except for catching, playing and cuddling pigeons these are enrichment activities provided to captives by the zoo.

<sup>51</sup> For example, <https://www.youtube.com/watch?v=C2qOEzFyTzQ> dated 6<sup>th</sup> November 2013.

time he'd encountered people they'd been in panda suits, smelling like panda urine and faeces. (ZoosSA 2012c)

These Chinese strategies were talked about by volunteers, but Mia laughed outright at this point in her story:

And of course, the babies immediately run up to them because they don't smell Giant Panda, they smell human inside a panda suit. I just cannot understand how Wolong can get it so *wrong*.

### **The rational myth of scalable bears as *incorporation***

The turn to conservation was recognized as requiring stable, ongoing, widespread marketing techniques where all the organisations under the umbrella of 'zoo' could collaborate around captive breeding. However, Adelaide Zoo did not control the Chinese narrative of panda suits and offspring relationships. This application of humanist belief in captive breeding *globally* holds unexamined the idea — the presupposition — that defined, clarified understandings inevitably produce valid, stable, categories that inculcate progress and more control: progress and control being the desired outcome.

Organization... is the humanists' main tool for controlling the world. The more things there are that we want to be managed, designed, produced, or corrected, the more organization is needed to direct these operations. This, inevitably, leads to a *proliferation of administrators*, people whose job it is to manage and direct organizations. (Ehrenfeld 1978, p. 247, Original emphasis)

During the last quarter of the 20th century the American Association of Zoological Parks and Aquariums (AAZPA):

...stressed that widespread participation by members was essential to the endeavor's success. Maintaining the rational myth's credibility now depended on inscribing it more deeply into organizational practices. (Bayma 2012, p. 132)

This move, to make the remit of zoos as spaces to breed endangered animals by involving as many zoos as possible (or other similar spaces) nationally and internationally, challenged the once-upon-a-time colonial / empiric fun house spectacle of exotica. Zoos

were “organised” into respected, breeding enterprises. Each individual signed-up zoo-space would align itself (incorporate its zooing) to conform to this larger organizational goal. That is, zoos scaled themselves to an overarching AAZPA ethos.

Tsing (2012), explores scalability as the applied stasis and exceptionalism of western humanism and its unspoken, polarised, duality of *un-scalability*. She argues, “to scale well is to develop the quality called *scalability*, that is, the ability to expand — and expand, and expand — without rethinking basic elements” (Tsing 2012, pp. 505, Original emphasis). From this perspective, much is absented in the metrics of scalability where “diversity” is lost because changes are not allowed, even at the scale of individual-unit-like life forms — human or Other (Tsing 2012, p. 512). Scalability colonises matter/s which fall under its remit. It does this through organising and limiting matter/s to the measurements required, that is, a quantification incorporating matter/s into human requirements by remaking them to fit expansion: for example, workers, goods, places, life-forms or knowledges. What is more, by absenting many of the relationships that were the affordances of those matter/s, knowledge about and association with, those relationships / connections are also lost.

Relationships are potential vectors of transformation. Only without the indeterminacy of transformation can you nest scales — that is, move from small to large without redoing the design. (Tsing 2012, p. 507)

So, scalability requires stasis (basic elements organised to stay the same across levels), hubris (a belief in human exceptionalism) and lack (an absence of relationships between matter/s and / or knowledge about all the matters being incorporated into the scaling). Other matter/s are “transplanted...isolated...and (thus)...self-contained” (Tsing 2012, p. 512). This pattern of organisation, hubris and absent relations recurs across western humanism. For example, Strathern (2000, 2001) examines audit processes and practices as they entered academe from the last quarter of the 20th century. She concluded audit is, “seemingly applicable to all kinds of reckonings, evaluation and measurements”(Strathern 2000, p. 2). This is done by removing uncertainty and keeping only the ‘certain’ within the measuring apparatus (Strathern 2000, 2001). Audit, as another form of scaling, removes the unfit-able / unscaleable so as to proceed

disconnected from entangling experiences; a diminishment of our surrounds and experiences.

Doubt and uncertainty...mould modes of being.... 'flexibility' is nothing without uncertainty to give it an edge, 'confidence' is shallow without doubt, 'reflexivity' cannot develop if there are no crises to work it against, 'communication skills' are untried until there is a dilemma to solve.... 'clarity' depends on the kind of puzzle that gets the intellect into knots before it begins to release comprehension. (Strathern 2001, p. 2)

But doubt and uncertainty are not measured by the apparatus of scaling or audit, as Tsing and Strathern argue. Rather, doubt and uncertainty are the non-basic elements that belie our exceptional status and are, therefore, *absented* from calculations. Strathern argues that “substance matters” (2001, p.2), and including more of the matter/s that matter, creates differences in outcomes.

At the zoo, earth Others are re/produced within the system, that is they are as self-contained as possible within the zoo system. For instance, most captives are no longer sourced from the ‘wild’ and they are medicalised through human manipulation practices (for example, artificial insemination). Furthermore, captives inhabit human builds which are remade landscapes based on human metrics, and are viewable within industrial timeframes (for example, zoo opening times are western 9-5 work hours, and ‘special occasion viewings’ often mean night-time). Zoos worldwide also conformed to the global institutions that govern breeding regimes via studbooks which attempt to “precision engineer” offspring for maximum diversity. Stasis, hubris and lack are employed in scaling bears into local zoos with global ambitions. A theory around nonscalability that will bring, “attention to the mounting pile of ruins that scalability leaves behind. Nonscalability theory makes it possible to see how scalability uses articulations with nonscalable forms even as it denies or erases them” (Tsing 2012, p. 506). This is instrumentalising the Other for ends not its own and incorporating the Other into a narrative / usage not of its own making, and without knowing bear-best interests (Plumwood 1993, p. 194).

This scaling also meant that the need to reproduce captives became imperative, as this is the chosen endeavour that positions these organisations as worthwhile and provides captives for the ongoing enterprise due to diminishing ‘wild’ stocks; the “rational myth.” It is from this global organisational perspective that the mediation around possible Giant Panda births and the lack thereof, came under strict control. One zoo “Key Message” pamphlet articulates this positioning to staff (paid and unpaid).

To create strong and consistent messages associated with every aspect of the Giant Panda project key messages have been divided into specific areas of the project. Overarching key messages for each section are represented in bold and should be repeated and top of mind at every media opportunity or public enquiry. (ZoosSA 2013g Key Messages: Giant Pandas)

The information about the bears includes reproduction notes on conservation, research and science, breeding and conservation support (*ibid.*). Items under “breeding,” for example, include the information about Giant Panda oestrus, which occur for as little as a few days down to a few hours *per annum* and therefore captive and wild breeding is “difficult”. In bold print, the key message is:

No matter the outcome of the breeding season it is about learning, understanding and sharing the knowledge gained with scientists, zoological institutions around the world and the general public. (ZoosSA 2013g Key Messages: Giant Pandas)

During fieldwork no ‘mating’ occurred between Fu Ni and Wang Wang. No pregnancy resulted from artificial insemination (AI) with Wang Wang or with a donor male Giant Panda. The unscalable pandas did not cohere to the scalability of AAZPA regulations in the spacetime of my fieldwork.

### **Seed bear incorporation**

Van Dooren (2009) is helpful here as he sums up Plumwood’s ethos compellingly, arguing that our current inability to cope with changing biospherics is down to the dualisms that underpin Western presumptions and actions. Plumwood places earth Others culturally, and thus ethically, where humans are re-established as *of* nature. However, “this redrawing of lines was not just about changing what we mean by the term nature,



but rather about challenging how we both think about and live in the world” (van Dooren 2009, p. 103).

In considering the global ‘seed-bank’ conservancy that began in the 1960’s, van Dooren examines *in situ* and *ex situ* banking projects and argues seeds, as substitutions for their parent plants, are a proxy:

...by definition, a proxy is not equivalent to that which it ‘stands in’ for.... the proxy is a ‘good enough’ embodiment or representation of something else for some given purpose. If *ex situ* collections of genetic and reproductive materials are being utilised as proxies — as ‘good enough’ representations — of organisms, varieties, and species, the question remains: *what exactly are they ‘good enough’ for?* (van Dooren 2009, p. 105, Original emphasis)

Seed banks are more about conserving genes and not biological diversity. In these attempts at conservancy, *in situ* is environment plus life form, whilst *ex situ* is the individual ‘essential thing.’ Stripped of all relations, van Dooren argues, seeds are instrumentalised for limited human uses and as such may not be ‘good enough’ for evolutionary *in situ* placements in spacetime matters of the future: because, in the past, now, and in the future, life forms require, “the relationships between them that produce functioning and resilient ecosystems” (van Dooren 2009, p. 108).

The banking of genetic diversity absents the relationships of *in situ* life forms. The outcome of this banking places conserving as ensuring a resource for the future rather than ensuring an *evolving* diversity. Our species cannot avoid human and Other life forms entanglements — for example, because we require sustenance — the question is *how* these entanglements occur. Other life forms, *as a resource* for humans, need to, “be allowed to *exceed* this use.... [where] we do not fail to appreciate all of the diverse ways in which plants and other non-humans are *more* than genetic resources for our projects” (van Dooren 2009, p. 108, Original emphasis).

The Giant Pandas in Adelaide Zoo are restricted to a mating pair: if not exactly equivalent to seeds in a seed bank, frozen until required, they are reduced to their reproduction prospects and ‘required’ to reproduce. But like the non-eco seeds, the pandas are not *in*

*situ*, evolving to a diversity of relationships but in captivity evolving to human-manipulated surrounds. They are also not allowed to exceed their use as a resource (as discussed later), and as van Dooren asserts, if there are offspring *what will they be good for?* Since, as Mia understood it, the whole ‘reproduction’ narrative was questionable. As another western trope of the master narration that backgrounds the inexplicable (or unwanted as general knowledge) outcomes of dualistic thinking, this particular story made Mia disbelieve official narratives. Within the zoo, captives are instrumentalised as fungible participants in the entertainment market whilst also being positioned / homogenised, as lesser or natural beings in need of human support (control) that do not appear to conform to the ‘vital’ timings of human metrics. They are incorporated into human needs — which at the zoo includes the design of their exhibit, reproduction practices, scalability and genetics.

Volunteers questioned some of the more notable progress narratives around panda breeding, and the baseline thinking that incorporated pandas into human tropes. Their conservation ‘scalability’ depends on young pandas living within human metric affordances which are then mediated as best practices inscribed “more deeply” by volunteer-to-visitor narratives. Furthermore, pandas and any offspring they may produce at the zoo or in China, are more analogous to proxy seedbanks than eco-diverse systems; what *will* they be good for? Designed to be incorporated into ‘zooing,’ Giant Pandas as non-human (lesser) beings are deemed in need of intervention *and* are instruments of capital; they are both conservation worthy and monetarily an “inexhaustible resource” (Plumwood 1993, p. 194).

### ***Backgrounding environs***

During this human endeavour the captives, as the ‘resources’ being exploited / manipulated / incorporated, were subjected to human built environs, including limited (compared to ‘wild’) roaming / living space, altered seasonal climates (northern to southern hemisphere), where air, road and human traffic are extremely close by (and air traffic is *low* overhead); seasonal outdoor festivals, including motor vehicle racing in the city and amplified music and movies in the adjoining Botanic Park; neighbouring human sports fields — large and small; constant cctv surveillance beamed online; a human chosen mate; check-ups for oestrus and / or real / pseudo pregnancy for Fu Ni; camera flashes;

screaming children and people tapping or knocking on the glass wall to attract the captives. These other entanglements with the surrounds are backgrounded to avoid confusing the master narration of choice for these bears at this time. This narration proposes that conserving Giant Pandas *ex situ* aids / ensures their viability as a species but lacks attention to the zoo's *ex situ* problems.

Image 24: The 'reflections' from the glass walls.



For example, the glass walls of the Panda Forest are a built environ that visitors complain about to volunteer guides. The 'reflections' off the glass walls of the day rooms, behind which the pandas spend most of summer, detract from the visitor's experience. Inside the front enclosure the temperature is conditioned to between 18-22°C while the external temperature can be over 40° C. In summer, the

bears spend a large amount of visiting hours (9.30 to 5pm) eating, sleeping, and moving about behind this glass as they only "tolerate temperatures up to 30°C" (ZoosSA 2013f, p. 27). The glass walls are not tilted to minimise reflection, and so, even within a metre of a Giant Panda, people complain about reflection preventing view-ability and good photography, as reflected flashes from cameras spoil panda photos. However, camera flashes upset Fu Ni, which is why signage and volunteer policing request visitors not to use flashes in the breezeway.

The zoo's attempts to counter some of these human interference happenings by placing volunteers in the Panda Forest during open hours are only partially successful. Reasons for this lack of success include that sometimes there are not enough volunteers to operate all the required 'stations' on a daily basis, or the volunteers refuse to attend certain

stations for various reasons. When ‘stationed’ in the Panda Forest volunteers attempt to prevent visitors going behind the no-go tape and point out the signage requesting ‘no flash pictures’ in the breezeway. One volunteer articulated her weariness at having to police camera flashes in particular. We were chatting in the breezeway of the Panda Forest and the volunteer took off to request that a schoolgirl close her ‘flash’ on her camera. When she returned, she said;

No one knows how to turn off their flash. And when they turn the camera back on, the flash is back.

I asked her why the flashes hurt the Pandas in here and not outside. To which this volunteer replied: “Something to do with the darkness and the window I think.” Visitors for the most part comply, accepting the volunteer’s management explanation of Fu Ni’s distress at camera flashes. Toddlers and young children often go behind the no-go tape and walk along the edge of the glass, touching, tapping, leaning and sometimes banging on the glass to draw the bear’s attention. This is policed with mixed results.

None of these ‘human interferences in the becoming of bears’ is held accountable, by the zoo, for the non-mating, non-pregnancy status of the bears. The first season after arrival, and up to my fieldwork, various other reasons were disseminated for this ‘lack’ of reproductive success. For example, in the wild (it was assumed), and in Chinese captivity, an older mate would be partnered with a just-reached-maturity mate. The reasoning offered was that Giant Pandas uninitiated into mating are ‘reproductive-learners’ and therefore a few attempts / seasons may be required to ‘get it right.’ Secondly, the hemispheric seasonal difference needed to be considered and time would diminish this ‘problem.’ In the event that mating / pregnancy still did not occur, artificial insemination would be attempted with the assistance of Chinese panda reproductive experts.

Artificial insemination will be used alongside natural breeding attempts and is a vital breeding technique due to pandas’ unique reproductive biology with a very short reproductive window of 48-72 hours.... We are hoping for a natural mating as it is clear our pair are compatible, however, young age and inexperience has prevented a successful mating in the two previous breeding seasons. Alongside natural mating

attempts the team will perform one or more artificial inseminations, a procedure that will be lead by Mr Huang. (ZoosSA 2013b, p. 2)

Zoo volunteers would read, hear and / or be counselled about these (rational) arguments and take note on the zoo's preferred wording and tone of delivery for these explanations about the lack of panda reproductive success. The messages were positive, upbeat and always looking ahead to the next possibility for success, where Wang Wang and Fu Ni, were incorporated into a narrative of ambassadorial, reproductive or educational roles. One hundred per cent efficiency is a remote dream of the master narration but this information is backgrounded so as not to interrupt the belief system too severely. The environs are the affordances to which we adapt, and these are necessary and co-producing matters of becoming Giant Panda, or human or any Other life form. These are, however, denied by an absence of narrative around these other matters of becoming Giant Panda; they are in Plumwood's terminology, 'backgrounded.'

### ***Homogenising — offspring and habitats***

Giant Pandas dentition and gut categorises them as Carnivore while their food source of 99% bamboo denotes them as herbivore (ZoosSA 2013f, pp. 7 - 8). This particular set of Panda 'facts' is why there is ambiguity around the classification of this particular species: their physicality fits more than one category. Humans have to recognise various 'traits or essences' of animates to be able to classify them — a measuring process of homogenising — that fits the species to the essential 'same' characteristics while absencing or downplaying differences. Volunteer notes define species as, "a group of similar individuals that are able to interbreed in the wild" (ZoosSA 2013d, p. 15).

Grosz (2004) examines how, through time, changes are inevitable and how this makes redundant the fixity of category. What should be followed and attempted to be understood are the fluxes and flows of life forms as they relate to their surrounds. For example, searching for 'our' origins depends upon what we choose to look at / for — which is another way to say we are implicated in the measurements we make.

What constitutes an origin depends on what we *call* a species, where we (arbitrarily or with particular purposes in mind) decide to draw the line between one group and another that resembles it, preexist it, or abides in close proximity with it...an

arbitrarily chosen set of similarities that render other differences either marginal or insignificant.... Origin is a consequence of human, or rather, scientific taxonomy, a function of language. (Grosz 2004, pp. 23, Original emphasis)

So, too, Kirksey (2015) comprehends classifying as implicated in processes of speciation, where human categories are interweaved in what emerges as a ‘species.’ Rather than being independent from our interventions, species also emerge because humans create categories and narratives that entangle the life forms under scrutiny into our processes and productions.

Economic interests and political forces are constantly transforming existing categories and bringing new ones into existence. When there is active interest in a given form of life, categories proliferate. (Kirksey 2015, 762)

Human metrics and the processes of science, capitalism or other ‘ventures’ — humans’ ‘active interest’ — are also entangled in ongoing speciation. The ecologies that are the affordances of life forms — across scales and with unknown relationships to diverse Other matter/s — that produce speciation, also become entangled with us and our ‘human’ practices. This meshes us with the ‘out there’ where, “reality is eminently material and solid, yet still pliable enough to be torqued by human practices.” (Kirksey 2015, p. 763)

As shown with the Giant Pandas, at different times, different humans in different specialities, classify species differently. This explains the ambiguity around how many bears the zoo actually held captive in the late 19<sup>th</sup> early 20<sup>th</sup> century, where, “six out of seven species now recognised by most zoologists have been exhibited” (Rix 1978, p. 184). The volunteer notes support Maya’s Giant Panda interpretation (above) as one of “the eight species of bears” (ZoosSA 2013d, p. 16). When reproducing (managing, producing, organising) a zoo, various experts, including *zoologists*, *biologists*, and *geneticists* (to name a few) get to recognise / categorise / account for the collection. During my training Giant Pandas were being re-assessed under the Linnaeus system where their Family classification of *Ursidae* was being questioned.

If you are reproducing an abattoir, pet shop, farm or frozen food business, then various categorisations would be ‘different,’ although the ‘same’ process / justifications / incorporations would occur to achieve the best results for a particular human endeavour. To reproduce the category under which you have placed your organisation you need to adhere to the categorisation extant within that spacetime matter, that is, the active interest being practiced. At this point, the ‘torqueing’ of the pliable matter/s would be occurring (Kirksey 2015, p. 763), with the real material / matter outcomes differing for zoos, abattoirs, pet shops, farms or frozen food businesses.

Animals are an obvious and major source of human / nature continuity, presenting a complex play of both similarity and difference.... Under the sign of the Same or Self, animals are assimilated to the human or seen as reduced or impoverished versions of humans; under the sign of the Different or Other, animals are treated... in ways involving radical exclusion, and constructed as alien. (Plumwood 1993, pp. 122-3)

The master narration can swing it both ways and create institutions that design whatever ‘product’ is desired. By utilising earth Others in any way humans consider suitable, matter is manipulated — to make it so. *Reality* for these earth Others is, however, an evolution not a classification. Posthumanism posits that movement, and not fixity, occurs: the universe is expression not dormancy, and homogenisation or stereotyping suits a human perspective of, in this case, what function *in the zoo* Giant Pandas’ perform.

Thus, having evolved to the affordances of the surrounding environment / space fashioning them, Giant Pandas currently express themselves — as classified by humans — as herbivores that were once-upon-a-time carnivores (and that retain carnivore dentition and gut) whose energy processes disallow hibernation in a home / wild habitat that is seasonally snow bound at high altitude, and one-at-a-time parenting for sometimes twin / triplet births, all of which are the serendipitous result of a reproduction cycle that occurs once a year for as little as few hours, or days, at best (ZoosSA 2013f). And, like all matter/s, Giant Pandas are still evolving to their surroundings, be they *ex situ* or *in situ*. So, how does this emerge in the zoo with volunteer energies as another additional intervention?

One day in the Panda forest a volunteer, Lacey, offered an overseas visitor a nugget of information about these captives as he stood watching the bears in their cool, interior, rooms. The visitor was on holiday from the UK and asked about the bamboo, to which Lacey offered up the quantifications of the volunteer notes. She then asked the visitor if London Zoo had Giant Pandas, but he had not been there, just to a smaller zoo, *somewhere else near London*. But the visitor thought that it *could not probably build an enclosure like this one, to keep them warm though*. Lacey informed the UK visitor:

Oh, they come from a cold climate and London would probably suit pandas better than Adelaide.

Lacey's understanding of *in situ* and *ex situ* panda affordances included the knowledge that no matter the build, there were possibly better locations for pandas to be relocated than in the hot Adelaide climate. The UK visitor seemed interested to hear this; volunteer knowledge sometimes overturned management attempts at homogenising the captives into assimilated, passive, objects.

### **...offspring homogenisation**

Successful panda mating is reduced in the home / wild habitat of China, due to the diminished numbers of bear, together with siloed habitats (due to human encroachment etc.). When mating and twin or triplet pregnancies do occur in the wild, the female nurtures only one offspring: Giant Panda reliance on bamboo does not supply enough energy for nurturing multiple offspring at one time (ZoosSA2013f, s. 16, 20, 22). The reality of this small window of reproduction possibility and dire outcomes for twins / triplet births was taken up by the zoo as one of the reasons for keeping Giant Pandas. The zoo argued more offspring *could* be born in captivity (with the female panda's cooperation) and raised, compared to the wild, due to a: "Better diet. A reliable food source. The lack of predators. Constant veterinary care" (ZoosSA2013f, s. 21, 22, 26). In captivity, multiple-birth offspring are rotated between time spent with the mother and time with the keepers, so that both / all offspring receive maternal nourishment and care. The female Giant Panda does not reject, or in other ways limit, either / any offspring having access to her — one offspring at a time — under these circumstances, according to the official narrative.



The CEOs 2011 Annual Report conveys the prevalence and normativity of humanist thinking, where human control, through interventions into the bears lives, was situated as a distinct advantage for these pandas.

Fu Ni is now sporting a patch of clipped fur on her lower abdomen so she can get used to having an ultrasound probe pressed to her skin. She lies patiently as this is rehearsed so that when we believe she may be pregnant we can try to locate a tiny little panda foetus.... or two. For this moment to arrive we will have to help the two youngsters navigate courtship when they are both mature. (ZoosSA 2011a, p. 7)

Intrinsically recognizing the value of earth Others in and of themselves is absent for the female bear in this narrative. Fu Ni, as meriting human recognition, is seconded to her being the recipient of human caring. The value resides in the zoo's medical intervention, that is, in "experiences, virtues and attitudes of carers" (Plumwood 1993, p. 214). She is homogenised to the human requirement of 'breeder.' Once again, the affordances to which the bears adapt are human created affordances and not the 'wild' or home-habitat affordances of their 'genetic' ascendants.

Here, genetics is invoked as the latest classificatory, best practice, narrative of humanism. However, recently genetics has come to be understood as 'epi,' that is part 'nature and part culture' (c.f. Consoli 2014). Epigenetically means what is passed on biologically, is entangled by the context into which it emerges, that is sociologically (Lock 2015, pp. 151, 152 ). Lock's perspective incorporates, "understanding epigenetic findings as embedded in environment writ large... in historicized and politicized contexts" (Lock 2015, p. 152). This makes the biologics of genes less deterministic and more bio/sociologic; 'determinants' are relational to the surrounds into which offspring emerge, and for these pandas, this means the human 'habitat' builds.

From this homogenised perspective, the pandas' lesser status in their *in situ* home-habitat creates the need for human intervention. However, this replaces the responsiveness of humans to earth Others *own* agency, with a 'caring for them' virtue *by* humans. "An account of value in terms of the virtue of care and the value of caring relationships presupposes rather than replaces a non-instrumental account" (Plumwood 1993, p.214). A mutuality whereby pandas are recognised as having agency and ways of becoming —

a non-instrumental reckoning — is, during multiple birthing events, replaced by a presupposition of instrumentalism ‘caring for’ value which is considered virtuous and therefore beyond reproach. That is, a ‘caring for’ value, which is considered virtuous and normative, replaces mutuality. Pandas and offspring are homogenised or stereotyped within the virtue of human care.

### **...habitat homogenisation**

Simulating the bear’s “natural habitat,” as promised in the Annual report (ZoosSA 2009a), is also a narrative of human control. By incorporating human constructions to replicate ‘natural’ habitat, equivalence is granted where it does not exist. One keeper, Eileen, had been involved with the Great Panda project and the building of their enclosure. She reminisced about the problems encountered with multiple players in the endeavour:

There are fifty things I would change in the Panda Forest. The architects, well they wanted what they wanted, and someone else had to build the thing... So.

The division of labour, from keeping and experiencing the captives, to designing a ‘best practice’ habitat, to building the actual materials into an enclosure (not to mention mining / obtaining, manufacturing, and transporting the building materials, humans and energy to the zoo site) are compartmentalised, separate endeavours. These separations come with their own entangled emergences in capitalist market world where the energies at work are numerous and often unknown to the other participants in the endeavour. For example, legal contracts, administrative and financial procedures, and audit, all function to create relations between siloed specialities that pursue self-interest to reproduce themselves. They do this by exploiting the resources at their disposal, in this instance bears, building materials, sponsorships, media, architecture and the skills required to accomplish these pursuits. These exploits are what Gleeson-White refers to as “externals” in accounting where Other matter/s — that is the natural world — are not ‘counted’ (2014, p. xv). Plumwood recognises the, “rise of capitalism ... needed to turn nature into a market commodity and resource without significant moral or social constraint on availability” (1993, p. 111).

Thus, the zoo bears are part of the commodity 'nature,' which is constructed upon the skill sets of myriad, separate, human efforts that on a closer, posthuman, inspection are not compartmental but relational. Giant Pandas are homogenised, or stereotyped, to accommodate human manipulations. Plumwood (1993) argues the originating presumption of separateness cascades through western thinking. Here, "atomism treats ultimate individuals (particles) as hyperseparated, their relations to other individuals inessential at best" (Plumwood 1993, p. 125).

Not being allowed to *exceed* human classifications and usages I argue, homogenises bears to fit human zoo builds. Who, for example, would / could criticize the virtue of care? Thus, the limitations of humans and their knowledges, and resultant applied techne, is normalised so as to be indisputable.

### ***Radically excluded captives***

Another design problem was the mulch in the Panda Forest day rooms. The bears were quarantined for 30 days (ZoosSA 2010, p. 137), after arrival at the zoo, as are all incoming captives. This is standard procedure, to diminish the possibility of spreading disease. When Fu Ni and Wang Wang took up residence in the Panda Forest, the mulch, in the front enclosure glass walled room, was replaced intermittently with fresh mulch.

After a couple of years, it was noted that the Pandas had retained (or acquired) a gut worm believed to have been eradicated, or not present, before their arrival. It had not been detected during the quarantine period and subsequently the Giant Pandas were cleared for exhibition. Scratching was observed in both Giant Panda's and volunteers were asked to quantify this behaviour during a brief period in early 2012 by closely observing and noting down scratching in both Fu Ni and Wang Wang. Volunteers were informed that the:

...mulch is not breaking down the bacteria, and unfortunately means that the Pandas are regularly getting worms (the public don't need to know this). By replacing the mulch with concrete, this should prevent this issue, but will alter the look of the exhibit in the day rooms. (ZoosSA 2012f)

Volunteers were informed about this at a monthly meeting in 2012, and also that the mulch layer in the day rooms was to be replaced with concrete (to match the rest of the inside exhibit). My notes read,

The mulch is just inside the mirror-like glass, on a raised but viewable level with the breezeway. The only ‘green’ in the Pandas’ front-of-house room is the bamboo placed inside for the Pandas to eat. There are large trunked, dead trees for them to climb and sleep in, but no other greenery. The mulch is the only ‘soft’ place the visitors can see. The Pandas often go to drink or wade through a pond that is concealed by the surrounding pseudo-rock formations. Observers can see the little fall of water into the pond but not the ‘pool’ itself.

At the monthly meeting a keeper informed volunteers that the pair of Pandas *like concrete anyway. In the wild they sleep on rocks, and concrete duplicates this experience. It is only us (humans) who find mulch aesthetically pleasing. The Pandas prefer concrete.* The mulch was removed, the concrete laid, and the Pandas had worm treatment administered. The original choice of mulch for the day rooms was backgrounded with a reference to its ‘only human-aesthetic pleasing qualities.’ The ‘benefits of concrete’ narrative, where this choice is equated as replicating ‘wild’ habitat, is now the rational choice for the zoo.

Image 25: A trimmed Moreton Bay (right).



At the other end of the gastrointestinal tract there are also panda problems. The two outside Giant Panda enclosures are over-shadowed by two, large, Moreton Bay fig (*Ficus macrophylla*) trees, which were planted before the space became a zoological park in 1883. A Zoos SA horticultural brochure

states: “Many of the older or exotic trees presented in this booklet, were planted in the early 1870’s when the site was originally part of the Botanic Park” (Richardson & Lugg). They were part of the encircling Botanic Parklands’ “green belt” of Colonel William Light’s vision for this planned Australian city (Sumerling 2011, pp. ix-x).



Image 26: Moreton Bay Fig after lopping.

However, as a newly founded aspirational city, Adelaide and its surrounds endured decades of “exploitation, alienation and re-creation” (Jones 2005a, p. 502). For example, the parklands were sources of building materials where tree lopping, rock and sand mining were carried out illicitly, creating “ugly sights.... [through an] ‘out of sight out of mind’ attitude” (Sumerling 2011 p. 179). Rehabilitation included planting northern hemisphere trees to replicate remembered homelands in “plant transmigration.” (Jones 2005b, p. 350)

Two of these fig trees tower over both the ‘deciduous and fir’ outside panda enclosures. The horticultural brochure states that the “Moreton Bay Fig produces large amounts of small fruits which are delicious” (Richardson & Lugg). There was consternation when the trees were fruiting plentifully, and numerous ripened ‘delicious’ figs fell into the panda’s enclosures. Volunteers received panda update information about this conundrum in a monthly newsletter, under the heading, Pandas:

Both have been locked in for a week due to fig eating (in very large quantities!). Electric fences are being trailed [*sic*: trialed] to stop them eating too many. (ZoosSA 2012g)

Electric wire was installed within both exterior enclosures to cordon off the fig drop-zones, to prevent fig consumption. The female panda Fu Ni developed a particular taste for these sweet fruits and would gorge on them. In response, large overhanging branches were removed from the Moreton Bay trees, which depleted their shade effect in summer, but the trees were so expansive that this measure was deemed necessary. Both Giant Pandas were ‘zapped’ by the electric charge and henceforth avoided the installation and thus the figs. The electric wiring was deemed successful.



Image 27: Tree'd Fu Ni

One volunteer admitted having a forebear who had espaliered these fig trees to allow them to grow so expansively. He mentioned this connection during an interview at a zoo café, and a fellow guide closely, but good-humouredly, questioned him about this connection. This espalier tree work would have been done some time in the early 20<sup>th</sup> century following the template of a planning, funds and planting ‘action plan’ report, written in 1880 (Jones 2005b, p. 361). Today, large Moreton Bay Fig Trees dot the surrounding parklands, providing shade, arbour walks in the Botanical Gardens, and driveways on the golf course (Jones 2005a, p. 503). Within the zoo, apart from offering illicit panda food, Moreton Bay Figs provide many architectural backdrops to enclosures, and, for the South East Asian Rainforest (SEAR) Dusky Langurs and Malayan Tapirs, a

day enclosure habitat. Their particular fig was planted in 1878 (Richardson & Lugg, tree 24).

If the trees had not been espaliered 100 years ago, the lopping of limbs, and the assembly of electric wires, may not have been necessary. However, they were espaliered, the ripened, over abundant figs did drop down to an appreciative consumer below, and human control / intervention was deemed necessary to prevent ‘over’ consumption of non-Giant Panda food. This zoo narrative provides insight into the need for iconic, ambassadorial, or even non-iconic / ambassadorial captives to remain within the human remit of their captivity. It also highlights the entangled materials that come into play and fall into ethnographer’s laps.

When bears were exotic Others to be peered at in pseudo-artic, whitewashed, concrete pits their responses to surroundings were taken into limited consideration, all of a human controlled variety. For example, in, “1911 a cage was added to the Polar Bear house to allow them more room for exercise” (Rix 1978, p. 31). In the Artic these animals roam widely, swimming many miles from frozen ice flow to frozen flow. One wonders what ‘bear’ benefit was achieved from doubling (possibly) their exhibit square footage. Today, the zoo bears are endangered, precious, expensive, ambassadors that must be monitored, mediated, medicated and reproduced. Eating figs may or may not have had deleterious, or beneficial, effects on the pair of pandas. But they, and we, will remain ignorant of the possibilities, because the affordances of the environment in which the pandas emerge, is a human controlled version — a representation — of homeland / natural / domesticated / wild habitat. Eating figs does not ‘fit’ the narration of Giant Panda: evolution in a zoo means adapting to the affordances of human measures. The captives were restricted to fit the homogenised human stereotype of Giant Panda.

Best practice panda exhibit with mulch in 2009 when the Giant Pandas arrived, to best practice panda enclosure with concrete floors in the day rooms, and non-fig eating pandas living under delicious fig trees. The master narration progresses human control from then to now but denies the fallout from incorrect, lesser, or without particular outcomes being predicted, human choices made in 2009. On discovering a problem for the zoo and its affiliates, and for the pandas and their (assumed) health, the narrative is positioned to

extoll the humanist belief system of control and exceptionalism. It is equivalent to painting the bear pit white.

Without understanding how the original cut of humans from nature sets the scene for ongoing cuts to make the hierarchy, as Plumwood theorises, the zoo fulfils their obligations according to the tenets of humanist, progressive time for humans who are exceptional to all else *and* in control. Opting out *without* understanding the originating presumption of humans as exceptional to all other matter/s whilst also being in control of all other matter/s, is not an attractive option. It is agnological, in that for westerns this knowledge is not factored into the day-to-day workings of our lives, and therefore is an unknown unknown.

### **Conclusion**

By placing the onus on *westerns*, and tracing back through history to detail how our ranking system began and how it is perpetuated, Plumwood clearly illuminates the presumption of western exceptionalism. Her five features of dualistic thinking clarify the zoos' humanist narrative on captive bears, past and present. The instrumentality of simply leaving a past 'cage' viewable to current visitors posits a 'we know better today' attitude without ever having to speak to the past and its oppressions, nor explore the equivalences that remain. Further, articulations of remorse and empathy for past captives reinforce a 'progress' narrative, as does communicating 'state of the art' builds to hold captives, whether from circa early 20<sup>th</sup> or 21<sup>st</sup> century. These built environs support humanism's perspective of extending rights to other life forms, although being limited to market world expectations, outcomes mostly (only?) reflect human priorities.

Another example is revealed in the attempt to replicate home-habitats without fully knowing species' requirements, nor an individual captive experience / preference, or the possibility of earth Others *exceeding* of our usages. In these cases, keepers and / or volunteers often articulate opposing knowledges to those being mediated by management, where following the global zoo 'system' stands as a defence. A lack of acknowledgment that the zoo-surrounds affects how bears emerge also create different 'versions' of western human progress and control. Breeding attempts and failures, captive behaviours, and inappropriate or unforeseen outcomes of builds need to be



explained, and staff (paid and unpaid), are given information on how to clarify these events to visitors. Yet, the outcomes of captivity are visible and do confound people — from no offspring, to not allowing camera flashes, laying more concrete, cutting heritage tree limbs off and putting up electric fences inside exhibits where captives roam and get ‘zapped’ — many events confuse and confound visitors and volunteers alike.

Bears have always been considered a valuable attraction for the Adelaide Zoo, that is they rank highly as *big... pretty and....easy to see* (Osborne 2013). The current iconic captive bears communicate many of the contradictions, or irrationalities derived from western dualisms, of ‘becoming’ zoo (Plumwood 2006, p.118). *Without* an understanding that in bears, as in all other matter/s, humans have both affinity and variance, that is “mutuality.... both kinship and difference” (Plumwood 1993, p.157). As beings similar-different to bear, we are not exceptional to them; rather we are responsible in our becoming to all other matter, including bears. In not recognising this reality, the zoo remains locked into the western foundational presumption of control over all matter/s and progression ever onwards, caused by our separation from nature, the “unresolved dualism” (Plumwood 1993, p. 162).

In the next chapter, I examine wayfaring and habitation in a place of captivity, where, by applying Ingold (2000, 2011a) and his concept of “breaking through,” the strictures of humanism are sometimes confounded.

## *Captivity in the weave of the world*

There are human becomings, animal becomings,  
plant becomings, and so on.

As they move together through time and encounter one another,  
these paths interweave to form an immense  
and continually evolving tapestry.

Anthropology, then, is the study of human becomings  
as they unfold within the weave of the world.

(Ingold 2011a, p. 9)

### **Introduction**

Ingold (2000, 2010, 2011a) guides this chapter through my observations and participations and allows me to perceive the affordances of my field site with altered awareness. As western dualisms create separations throughout our lives, perceiving our interconnectedness wanes. “In constituting the world as a set of apparently independent and discrete objects, the interdependent and entangled nature of the world becomes more difficult to perceive” (Anusas & Ingold 2013, p. 59). Through his work I came to understand life as a connection and movement. Also, that my field site at the Adelaide Zoo escapes the hectares within which it presents itself to the surrounding city, spilling far beyond its newly installed boundary walls.

The nearby residents of North Adelaide and Hackney, for example, live with an overflow of communicative exchange from the neighbouring ‘wildlife.’ These exchanges include escapes by birds, the roar of lions and tigers, the calls of gibbons and the daily comings and goings of ‘zoo’ people. During fieldwork a female Sumatran Tiger, Assiqua, would often be my field site ‘welcome’ after I parked the car in McKinnon Parade, North Adelaide. This car park was situated between the parklands adjacent the zoo, and the sizeable, multi-storied, elegant homes of McKinnon Parade. The occupants of this street and myself were oftentimes privy to the Sumatran’s deep-throated roar.

Assiqua's communiqué interrupted the taken for granted city-urban hum from her backstage quarters.



Image 28: Assiqua on her night-quarters heated plinth.

These quarters provided a platform-high deliberation of the McKinnon homes, the adjacent playing fields of the Botanic Parklands, the flight path above, the traffic abuzz, requisite joggers, and dog / child walkers. All of these matters became part of this tiger's habitation at this zoo.

We *inhabit* our environment: we are part of it; and through this practice of habitation it becomes part of us too. We see with eyes trained by our experience of watching what is going on around us, hear with ears tuned by the sounds that matter to us, and touch with bodies that have become accustomed, by the lives we lead, to certain kinds of movement. Smells, too, excite memories and anticipations. This inhabited world – the world of our perception – includes the earth beneath our feet, the sky arching above our heads, the air we breathe, not to mention the profusion of vegetation, powered by the light of the sun, and all the animals that depend on it, busily absorbed in their own lives as are we in ours. (Ingold 2011a, p. 95, Original emphasis)

I would think of myself, on the days her rumble greeted me, as part of Assiqua's sometime rumble, and envisaged her sitting, behind the fully meshed night-quarters, on a high, heated (on cold days) concrete plinth, tiger-sensing the surrounds and the life forms journeying past her human built habitat. My prior knowledge of her backstage night-quarters area, with all its smells, sights, sounds and tactile reality, the concrete,



Image 29: Tiger night-quarters, with Botanic Park's trees in view.

bars, metal pulleys, overhead walkway, weighing dais, and a plethora of other materials as well as her roar, co-informed her presence to my human senses.

These affordances of environment rather than the representations constructed to explain meanings of the zoo's sonic, sight, smell or tactile neighbourhood, are experiences (or practices / processes) of a worlding where daily living for inhabitants is mutually created. This approach allows that:

...if we are to understand the production of meaning, then we need to start from the *processes* of social life, and not from the cultural modelling of a given reality. (Ingold 2011b, pp. 326, Original emphasis)

This modelling is “the Western tradition of thought” where humans, and their perceptions, are categorised and “set over against the world” (Ingold 2000, p. 243). This thinking seeks the essential elements — the perceptive organs of sensing — and then burrows down to evaluate and explain how they work; in other words, a model of the organ. Contra to this, I attempt to entwine the, “common ground.... in which the strands of ...experience are woven together” (Ingold 2000, pp. 286, 287). For my research, this was a, “nexus of emotions, senses and spaces — where the ethnographer is engaged in understanding the relations between them” (Dundon & Hemer 2016, p. 2).

In explaining sensing as a process, rather than through classifying the sense organs with which we experience, our awareness is *with* light, sound, and tactility as we engage with biospheric conditions and all the matters therein. That is, where “qualities of sensory experience... are phenomena of the weather-world. They belong to the fluxes of the medium, not to the conformation of surfaces” (Ingold 2011a, p. 134). Perceiving, as a multifaceted, entangled attentiveness to environs, is explored in this chapter, where I examine representation as a way of thinking that reveals how separation and subsequent dualisms pervade our research.

For example, the western primacy of ‘vision versus hearing’ splits senses into quantities of perception, so as to explain them, and allots positions in an abstraction of hierarchies.

It is unreasonable to blame vision for the ills of modernity... the responsibility for reducing the world to a realm of manipulable objects lies not with the hegemony of vision but with a ‘certain narrow conception of thought’ [where]... to see is to reduce the environment to objects that are to be grasped and appropriated as representations in the mind. (Ingold 2000, p. 286-7)

Representations make moveable-changeable the static categories through which westerns comprehend and accrete knowledge. By separating ourselves out from all else that exists we secure or fix our evolving selves, and all other matter, so as to understand the world. This stillness of classification informs all of our knowledge through the mechanism of “inversion [which]... turns the lines of ... generation into boundaries of exclusion” (Ingold 2011a, p.117). The outcome of our exclusionary divide is our constricted understandings. A preferred understanding is that, “wayfaring is the fundamental mode by which living beings inhabit the earth” (Ingold 2011a, p. 12). In the sensory realm, for example, a readjustment from stasis to movement creates new perspectives, where the:

...environment that we experience, know and move around in is not sliced up along the lines of the sensory pathways by which we enter into it. The world we perceive is the *same* world, whatever path we take, and in perceiving it, each of us acts as an undivided centre of movement and awareness. (Ingold 2011a, p. 136, Original emphasis)

This places us as enmeshed within our environs, where mobility and immersion best describe life forms' emergent becoming. For the humans who attend the zoo regularly, as staff or volunteers, the official zoo mediating narratives are often countered by life's becomings. What occurs is a world being woven even though it is also being humanly classified-categorised and then re/presented. It is here that ecology challenges economics.

Tension is inevitable between the professional mission to convey serious messages of scientific and environmental education and the economic drive to fulfil the desire for recreation and entertainment. (Hallman & Benbow 2006, p. 261)

Interweaving of western economic thinking with ecological perspectives gives rise to many of the narratives in my field, including western representations of *in situ* captive home-habitat with *ex situ* zoo created exhibits containing those captives. However:

...in modern western societies, the environment has been engineered, or 'built', to conform to expectations of closure, but ... life always, and inevitably, breaks through the bounds of the objective forms in which we have sought to contain it. (Ingold 2011a, p. 115)

### **Arrangement of chapter**

It is Ingold's (2011a) 'boundary breaking' emergences that I am pursuing in this chapter, and I begin where the zoo — as a western engineered build — is a sensorium of perceptions, with gibbons from South-east Asia creating waves of movement in the biosphere of the place. Journeying from Siamang calls to bird song, worlding relationships are explored via the possibilities of connection through 'animistic' thinking. Then, an excursion with zoo visitors through the *Big Cat* built environs, where an exploration of recently constructed representations of 'wild' habitat abut 100-year-old concrete, meshed, and barred structures. Next, the emergent lives of Sumatran Orangutans are compared to a once-upon-a-time Orang from Borneo, who became a much loved, long-term occupant of the zoo. Following on these comparisons, the ideal of Sumatran Tigers' zoo-built 'natural habitat' with volunteers' experiences of this habitat are made, as are my observations comparing the backstage night-quarters of one species of Big Cat with the front-stage exhibit of another. This final section ends with an

excerpt from a long-standing volunteer on how *narratives* about human and captive experiences of captivity alter while little discernible captive *life-change* takes place. Throughout the chapter, I juxtapose my interlocutors with Ingold's insights into how the stasis of humanism is broken through by wayfaring life forms at the zoo.

And I now return to 'breaking through' my early morning reverie, where, upon parking the car in MacKinnon Parade, Assiqua carries on rumbling as if residing in-jungle. My response and feeling of welcome walking across the mown grass of the Botanic Parklands, equates to an "intimate coupling of the movement of the observer's attention with currents of activity"

(Ingold 2011a, p. 223).

Assiqua's activity alerts keepers and the two other Sumatran Tigers, Tuan (male) and Kemiri (female), to her in-seasonality, and she alerts myself, as I tread my way over the intervening parkland grasses, to the prospect of fieldwork and the activities ahead.



Image 30: McKinnon Parade, North Adelaide

Humans... are brought into existence as organism-persons within a world that is inhabited by beings of manifold kinds, both human and non-human. Therefore relations among humans, which we are accustomed to calling 'social', are but a subset of ecological relations. (Ingold 2000, p.5)

The neighbours of the zoo, who also attend to the calls of African lions and two species of Southeast-Asian gibbon, included one of my PhD supervisors. Acoustically within range, he recalled living in a rowdy 'ecological relationship' with the zoo's Siamang-gibbon troop.

## Gibbons

Siamangs are the largest of gibbons. They sound out their territorial claim a couple of times per day using their balloon-like throat sac to best affect. Many zoo visitors mentioned this call as the zoo acoustic. Questions often posed by new visitors to volunteer guides about this raucous cacophony included: *It's SO loud! What is making that sound?* Or *What is that? Where are they?* These sounds act as an acoustic lure upon visitors as they move towards the sound, drawn to see what they are hearing.



Image 31: South East Asian Rainforest (SEAR) Siamang tree (ZoosSA 2009b)

Link: <https://www.youtube.com/watch?v=06LjsqniZuA>

For those who attend this zoo industriously, the staff and volunteers, experiencing these captive communications generates “pathways of sensory involvement” (Ingold, 2011a, p. 133). For these humans the gibbon clamour plays as a soundtrack to the experience of the days’ work, orientating but not intruding. They are, “haptic engagement ...close range and hands on. It is the engagement of a mindful body at work with materials and with the land, ‘sewing itself in’ to the textures of the world” (Ingold 2011a, p.133).

Guide volunteers often acknowledged that the sensory accoutrements of the zoo, including the raucous call of the gibbons, and the walk to them, permitted introductions to visitors through answering questions or offering comments on the captives.



Vision, hearing and the rest are aspects of action — ways of attentively going forth in the world; they are not filters in the conversion of external physical stimuli into internal mental representations. (Ingold, 2011b, p. 325)

For guides, the gibbons provided access to visitors through questions and experiences, and by permitting dialogue that overcame stranger / familiar boundaries. For the zoo this attentive to-ing and fro-ing between guides and visitors was a ‘value added’ resource. These interactions provide a pedagogic function, where education and conservation are key aspects of zoo’s mission statements, and a manifestation of the zoo’s reason for existing (Grazian 2012, p. 546). Thus, guides are enabled to educate with data involving species information, or with a narrative about a particular captive while walking with visitors towards the gibbons.

One narrative about the Siamangs, in *Walkabout* guide notes, includes the information that these are arboreal (tree dwelling) primates from South East Asia that live in familial groups (ZoosSA 2011f p. 4 Section three). The zoo has two such families. One abides in an earlier built, barred and meshed structure.



Image 32: The enclosure for the zoo’s second family of Siamangs.

The first Siamang family lives in the South-East Asian Rainforest (SEAR) enclosure built in the mid 1990s, with no bars or mesh to impede view-ability. This structure allows the viewing of animals in an exhibit built to resemble their wild home-habitat with access to

a tall tree, which towers over humans traversing the adjacent aerial boardwalk. From here the Siamangs hang, move about and utilise their throat sac to make the distinctive far-reaching call that resonates throughout the zoo and beyond. One gibbon family, then the other, begin their whooping, cacophonous, clamour that pulls the visitors towards them from all locations. I am unsure if the gibbon families can ‘sight’ each other between the open and bar-meshed exhibits. The large tree in SEAR certainly affords a wide vista, but my knowledge with its limited ‘on the ground perception,’ does not sweep that far.

Furthermore, not everyone would be happy to be neighbours with these boisterous primates. A pair of female giraffes that also have a clear appraisal of the homes near my parking spot in McKinnon Parade, have a keeper who informed me, with regards to the raucous primates and cats: “it would drive me crazy living over there. It would be a novelty that would wear off quickly.” She, however, experiences these zoo communications as part of her workday, while visitors actively seek out the makers of these sounds. Upon arrival at SEAR people can view the long limbed, all black, gibbons swinging around and blowing out their throat sacs: calling and calling. These tree dwellers are usually located high in the branches of their island exhibit when calling like this. Meanwhile, the behind-bars fellow family, move through the human-built tyres, tree limb planks and mesh walls of their home, sounding off and, anthropomorphically seemingly, replying to their conspecifics. Sometimes this communication ‘sets off’ their gibbon-cousins, the White Cheeked Gibbons (WCG) over the moat in SEAR.



Image 33: The moat between White Cheeked Gibbon island (over the water) and Siamang island.

These are a sub-species, categorised as the smallest of the apes (ZoosSA 2011f, p. 5 Section three). They too call and announce their territorial rights over *their* tree on their island, near the up-track of the boardwalk. Some volunteers' claim they can discern between these two calls of gibbons and even between the male and female of the White Cheeked Gibbon family.



Image 34: White-Cheeked Gibbons; Mother *Viet* and offspring.

One day, while guiding a group of visitors and myself around on a tour, Gena stopped in her tracks and cocked her head to listen to the calling White-Cheeked Gibbons. This volunteer guide was awaiting a forthcoming gibbon call.

Listen to them. That is Viet the female. She laughs at the end of her call. Listen.

The boisterous call we had been attending to ended with a decided laugh-like note. Upon the abrupt silence Gena mimicked this descending scale laugh; “Aaacckk-aacckk-aack.” She then burst into energetic laughter at her successful female-gibbon performance. I’ll return to Gena and her mimicking later. I want to explore more engagements and responses first.

### **Sensorial connection**

Having an ‘active engagement’ within my field lent me insight into my own responses to the zoo. One dispatch in my fieldwork notes state:

I had ventured into a beautiful spring day, to continue my zoo guiding assessments, with the Chiming Wedgebill’s melody haunting me to my destination.

This was the first time my notes mention my becoming aware of this sound without another guide drawing my attention to it.

The originator of this ‘haunting’ sound is a bird that many volunteers mention. It was once referred directly to me as an ‘L L B’ (a little brown bird) with a call that echoes from its (almost) central position within the zoo grounds. The volunteer guide *Wildlife Walkabout Tour* notes refer to the Chiming Wedgebill as “*Psophodes occidentalis* ... Far crying, beautiful, lonely notes, the first 3 high ringing... the last much deeper” (ZoosSA 2011f, p. 18 Section five). The diminished size and colour of this native bird positions it as an undistinguished creature amongst a plethora of alternate choices. But, for the volunteers, this little brown bird sensorially resonates. One volunteer, amongst many, cited this sound as their zoo favourite.

If I don’t hear it, I have to hang around and sort of wait for it, and I love pointing out to visitors that it is there. It is such a zoo sound that people just ignore it. They just toddle along and don’t realize that it is a little bird.

This impetus, to draw people’s attention to the bird-sound, to take people to view the bird, and in general to stop, listen and herald its resonances, is a widespread phenomenon within the guide group. This group also attempt to get the little bird to ‘chime.’ Usually, the bird makes this call to communicate with a partner, but many volunteers expressed the notion that they could get the Wedgebill to ‘chime’.

Image 35: Chiming Wedgebill (Photo by ZoosSA 2007).



Link: <https://www.youtube.com/watch?v=pmm6ZXQL6gA>

During one unattended-by-visitors walkabout tour with Sarah as a guide, she attempted to prompt the bird into ‘chiming.’ Having discussed her love of this species, we eventually wandered our way to ‘row 19’ of the bird collection and peered into the lightly meshed aviary, designated by the information board, as holding the Chiming Wedgebill. This row of enclosures houses indigenous birds, and this particular aviary is bushy and low, with night-quarters at the back, holding electric heaters, roosting places, and nesting boxes. To my gaze, it was dark and impenetrable back there. At the front, where we stood peering in, colourful Gouldian finches, one Australian Pratincole, and various other locals distracted us with their colour, flight, sounds, and general movements. The zoos’ Chiming Wedgebill had recently lost his mate and so everyone who was interested knew that this was the male we were hearing.

Sarah did a good whistle impression of the Chiming Wedgebill call, but the bird did not take it up and she was disappointed. “*Oh*, he is not going to answer me.” She tried a few more times whistling through the mesh, and eventually, somewhere in the dark, back-quarter’s interior, he began to chime. Sarah smiled and told me,

I love it that he gets louder and clearer. We recently went to the Alice Springs Desert Park and I swear that the Chiming Wedgebill I heard was coming from *outside* the enclosure.

This central Australian locale is designated as part of this bird's territory (Morcombe 2000, p. 284), and Sarah was pleased to think she may have heard a 'wild' call. We stood and listened to his chime standing almost mid-point of this artfully landscaped zoo-space, where plantings and built environs create a feeling of spaciousness in such a small zoo. These environs often preclude far views and vistas, and, as in a forest, sound connects where seeing is impaired. At the zoo, the Chiming Wedgebill's song, "map[s] the sound world as a spacetime of place, of connection, of exchange, of travel, of memory, of fear, of longing and of possibility" (Feld 2003, p. 237).

For Sarah, the zoo holds cherished memories of her son, brought here in the hope of sparking a remembrance ignited by a once favoured pastime.

To know he was with the animals he had loved. He used to run around and play, and call out, when he saw creatures and things.

A chance reaction to a common event caused her child injuries that proved, ultimately, fatal. On their many journeys to the zoo, during her son's incapacity, Sarah never established if he recognised this once special setting. For her, the zoo holds these connections to the past, not only in the built environs but the sensory ones as well. Sarah calmly described these past visits.

We would find a quiet seat — there are lots of those places here, where no one passing can see you — and sit, and eat, and watch, the animals. Sometimes, my husband would come too. Better to come here and be with him [rather than visiting their son in his care facility].

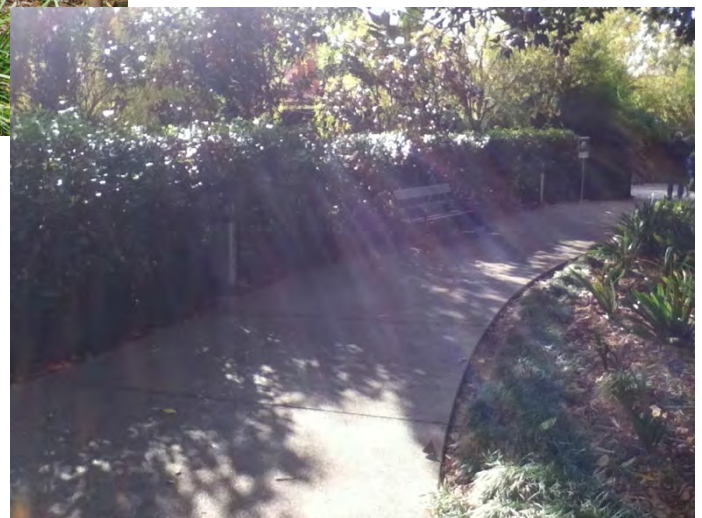
Attentive awareness is *with* light, sound, and tactility as we move about experiencing Ingold's atmospheric "weather-world" (2011a, p.134). Our sensing involves our surrounds, extending into, and with them, "as an all-enveloping experience of sound, light

and feeling [as it] .... commingles with, and saturates... consciousness, wherein it is generative of ...[a] capacity to perceive” (Ingold 2011a, p. 134).

For Sarah, the chiming calls inhabiting her weather-world immersed her in memory. The seating, concealing, bypassing, eating, watching, and accompanying are “all-enveloping experiences” commingling sound, light, and feeling, inundating Sarah’s memories, her thoughts and feelings. These *are* her perceptions. With captives as fellow inhabitants, wayfaring through the zoo had volunteers expressing inclusive “ways of going forth in the world” (Ingold 2011b, p.325).



Image 36: Quiet seating at the zoo.



### **Animism**

These evolving relationships between guide volunteers, captives, and their surrounds emerge as meaningful experiences. Gena’s mimicking of the female White Cheeked Gibbon call, anthropomorphised as ‘ending in laughter,’ and Sarah’s successful prompting of the Wedgebill’s chime, are, in Nuckolls’ (2004) terms, an orientation with Other life forms. They are, “an ideophone... imitative sound... that sonically defines.... alignment with the nonhuman world” (Nuckolls 2004, p. 72).

We westerns have, however, moved far from a topography that supports “ideophones,” as these are the remit of peoples who “make constant use of their language to express an attitude of alignment with nature” (Nuckolls 2004, p. 68). People shaped by co-involvement / co-evolvement during ‘active engagement’ with other species, creates traction from where to perceive the whole of life as one: a life habitation as opposed to a *human* life habitation. Western, subject / object, nature / culture understandings, from Nuckolls’ theoretical perspective, do not entangle Westerners in the surrounds in this way: we are *in*, not *of* the environs. Nevertheless, this usage of sound places oneself within the ‘Other’ life form’s world, a life world, I would argue, marked by forged associations between species. “I believe that sonic dispositions that give rise to exuberant use of ideophones emerge in cultures that legitimate animistic forms of thought” (Nuckolls 2004, p. 80).

Animism in anthropology is a boundary between humans and other life forms that is breached by various interlocutors in ethnographies and therefore needs explanation. The interlocutors, in their engagement with the world, form the conception (which westerns perceive as a *misconception*) that *everything* has “spirit or soul” (Willis 2005, pp. xxiv, Original emphasis).<sup>52</sup> Conversely, from a posthuman perspective, animism is interpreted as people understanding their immersion in the world where acuity depends upon being attuned to that *entire* world, a world of ecological relations. Rather than a misconception:

...animism constitutes a relational (not a failed) epistemology. This epistemology is about knowing the world by focusing primarily on relatednesses ...within the shifting horizons of the related viewer. The knowing grows from and *is* the knower’s skills of maintaining relatedness with the known. (Bird-David 1999, pp. S69, Original emphasis)

This separation, between relational animism and compartmentalised western ways of understanding our place in the universe, are where zoo representations and volunteer’s ideophone practices matter. Ingold asserts that indeed westerns do not lose this way of relating, but rather the surrounds of our way of life are not fore fronted *as* relational.

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<sup>52</sup> Willis (2005) is unpacking anthropology’s ideological perspective on nature and he augments this by explaining totemism and animism elegantly (pp. 1-22).



The difference is rather that within the context of the modern state and its political, economic, and educational institutions, relational ways of knowing have lost much of their authority. But they continue to operate nonetheless and remain deeply embedded in the experience of everyday life. (Ingold 1999, p. S81 in reply to Bird-David)

Wayfaring at the zoo and imitating Other life forms, I argue, makes for common ground, for being attuned with Other, a zoo worlding where, “worlding.... [is] the paths of the world’s becoming” (Ingold 2011a, p. 215). In what is thought of as such a human-engineered environment as a zoo, “animacy of the lifeworld ...is not the result of an infusion of spirit into substance, or of agency into materiality, but is rather ontologically prior to their differentiation” (Ingold 2011a, p. 68).

McLean (2009) is insightful here arguing that this generative universe ‘creates,’ and does so encompassing human creations — writing, art, and technology, for example — that are but *part* of the universe’s creative output. He suggests there are many creatives *creating* ‘stories’ in an unfolding universal narrative.

We need to recognize, first of all, that human beings are not the only, or even the principal storytellers.... various human stories... can be understood as products of, commentaries on and contributions to the “stories” woven by this continuously changing physical reality.... the world’s ceaseless self-transformations. (McLean 2009, p. 231)

This echoes the “common grounds” of perceptive experiences (Ingold 2000, p. 287). Zoo captives, from this ‘creative’ perspective, create within the confines of the provided-by-human affordances, which is a limited pallet for captive creativity (compared to home-habitat experiences) but they weave beautiful tales from within it as experienced by the receivers of their creative works.

This perspective goes some way to an explanation of why my morning greetings by Assiqua, and the resonances of gibbon and Chiming Wedgebill sounds, provide

communicative experiences at the zoo; captives are creating tales of “ecological relations” (Ingold 2000, p.5). That is, “it is the sensorial and spatial structuring of performance that allows the evocation of emotion” (Dundon and Hemer 2016, p. 7). In the zoo, the White Cheeked Gibbons and Gena, the Chiming Wedgebill and Sarah, and Assiqua for me, performed and evoked emotions. In this awareness, Other life forms are:

...producers of a reality endowed with its own dynamisms, its own historicities and its own signifying potentialities, irrespective of the meanings ascribed to it by human acts of culture making. (Mclean 2009, p. 231)

Human interpretations remain just that, ours. Communication remains open, mutable and generative as it resonates so beautifully and is appreciated so widely at the zoo. This creative output connects — to Other life forms, the physicality of zoo, the morning, the day, other people — a relational myriad. These volunteers emerged *engaged* with captives — not to adhere to zoo policy embedded within volunteer guidelines — but to join in for fun and laughter, or to linger in memory for just a little longer. Volunteers broke through the boundaries of normative meanings and moved towards or awaited a response from this Other life form.

Rather than having its evolved capacities filled up with structures that represent aspects of the world, the human being emerges as a centre of awareness and agency whose processes resonate with those of its environment. (Ingold 2001, p. 148)

This proximity between volunteer and captive was spatially and sensorially structured (Dundon and Hemer 2016, p. 7), that is, habitation *and* wayfaring produced emotional responses. These performances recurred over the course of my research, and I would argue, amply rewarded humans. I am unsure, but hope that captives too, were rewarded, because, as Mclean asserts:

...the inexhaustible creativity of Being, understood as the continuous emergence of beings (entities) of multiple kinds, in each of which, according to the tenets of an expressionist ontology, Being itself is understood to be equally and fully present. (Mclean 2009, p. 233)

Of course, there are still dualisms emergent too. For this proximity to captives is mined at the zoo to increase the resource value of visitors. The zoo sells behind-the-scenes experiences to access a further income stream, and, because where everything offers the possibility of being economically viable, that is of becoming a resource, it will eventually (have to?) do so (*c.f.* Gleeson-White 2011, 2014). On offer is the chance to get up close and personal with ‘wild’ creatures. I now explore some of these up-selling tours and the captive quarters in which they take place.

## **Night-quarters**

### **Immersion Hub: the Sumatrans**

The Immersion Hub exhibit has dual occupancy of Sumatran Tigers and Orangutans. It was built and opened in the 1990s specifically for these South East Asian species and was considered ‘state-of-art’ habitat architecture or, as Anderson (1995) refers to them, “ecological theatres” (p. 289). Tigers and orangs occupy separate, bespoke, exhibits built to secure them as comfortable, healthful and reproductive a captivity, as possible. For public ease of view there are glass panels, low fencing, water features, deep trenches, and horticultural plantings to represent each Sumatran species’ ‘home.’ The captive’s night-quarters — backstage builds to keep the occupants safe when staff are not on site — are completely different and it is in wayfaring through these various places that alternate meanings emerge.

There are two front, public, tiger enclosures, with mesh side-walls that prevent these Big Cats (categorised in the scientific genus classification, *Panthera*) from climbing them. Tigers will not climb anything that allows movement, and the mesh, although strong, is malleable and therefore bends under a cat’s weight. Eileen, a Big Cat Keeper, pushed at the mesh to show its malleability / movability as she explained the need for this material to encompass flexibility to this visitor group;

They climb up it if it isn’t [flexible] and, you don’t want to meet a tiger out here!

She then pointed out the extra metre of overhanging mesh and surrounding electric trip wires placed to reduce this latter possibility.



Image 37: Malleable mesh to stop the Sumatran Tigers from climbing. The *foldout access point* is visible in the third panel. This is also the *Watch where you step* enclosure.

The tigers have numerous lockable areas as night-quarters including a birthing den, overhead walkways, open to the weather floor to ceiling meshed ‘rooms,’ and various gates to access and move captives through each section. The orang and tiger keepers share a kitchen and storage area out here, as well. They do not share responsibility for each other’s captives however; tiger keepers are Big Cat keepers and orang keepers are Primate keepers.

The orangs have one front enclosure and an array of lockable night-quarters to the rear. Their front exhibit walls are high, solid concrete, with no allowance for hand / foot holds. As one keeper put it from inside the orangs’ front enclosure,

On THIS side you have a sheer wall. Not one toehold allowed! Orangutans are very smart and one little imperfection and they can climb a wall like this.

Here, she patted the orangs’ smooth, high, concrete wall.

Even so, Karta, one of the two female orangs, escaped from this enclosure on Mother’s Day 2009. She did this by utilising various techniques, including not returning to her night-quarters for a couple of nights when called by keepers, and thus, having the time to



Image 38: Karta and Kluet the Sumatran Orangs. Note the high, smooth, concrete wall, painted 'foliage' colour in the distance.

build a nest of leaves and twigs (hidden from human view). Karta collected these from the abundant vegetation growing in the front exhibit, and then scaled this vegetative built structure and tripped the electric wires at the top of her concrete wall with more vegetation. Upon attaining freedom, she ate a few banana tree leaves growing nearby and returned 'home.' This caused mayhem on a well-booked Mother's Day at the zoo, which had to be evacuated. This event was widely reported in various mass and online media, and to me at various times by fellow guides. Karta's habitation at the zoo showed an, "active engagement with the constituents of.... her surroundings" (Ingold 2000, p. 5).<sup>53</sup> A few keepers had to sleep *in situ* for a couple of nights to make sure no escape-recurrence ensued.

Another issue with this 'ecological theatre' is the knowledge of the designers and builders of the structure. They installed a foldout, meshed, walkway between the front, concrete,

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<sup>53</sup> At one stage, Ingold (2011a) goes into detail about why he changed to using habitation rather than dwelling. "To be, I would now say, is not to be in place but to be along paths. The path, and not the place, is the primary condition of being, or rather of becoming. For this reason, I have begun to wonder whether the concept of dwelling is, after all, apt to describe how humans and non-humans make their ways in the world" (Ingold 2011a, p.12). He had originally opted for dwelling as where, "immersion of beings in the currents of the lifeworld without which such activities as designing, building, and occupation could not take place at all".

primate exhibit, and the front ‘major,’ meshed tiger enclosure. It was assumed, by the builders, architects, and whoever signed off on the structures, that the captives could be interchanged between these two front exhibits to increase exhibit variety for the occupants. On behind-the-scenes tours keepers would point out this foldaway structure and laugh at the presumption of allowing primates’ access to climbable mesh and tigers to orang walls.<sup>54</sup>

Keepers, although devoted, are pragmatic about their charges and, in behind-the-scenes encounters, deliver blunt assessments on their behaviour. During a behind-the-scenes Big Cat tour one keeper asked a female Sumatran tiger: “Did you fart Assiqua? Thanks for that!” Later in that same tour, the Big-Cat keeper went on to narrate, to the silent but seemingly amused fellow paying visitors, how the zoo’s tigers and lions eat the same diet of meat. This diet consists mainly of horse, with chicken or turkey legs as tour treats, and an occasional dead zoo inmate of goat or sheep carcass, to fulfil ‘a waste not want not’ conservation ethic. The keeper insisted, however, that tigers produce:

...the smellier pooh. It *really* stinks. Watch where you step, there are beaks, feet and shit all around in here.

‘Here’ was the vacant Immersion Hub (front-public) exhibit of the male Sumatran Tiger *Tuan*, shared non-contemporaneously, with the female Sumatran Tiger *Assiqua*. Tigers live (mostly) solitary lives and these two tigers are rotated between the public and night-quarter enclosures. They were both locked away backstage in their night-quarters during this tour to allow human access to this front exhibit. The other female, *Kemiri*, lived her life in the second front tiger enclosure and was locked in at night in a purpose-built night-quarters that kept her entirely separate from the other two tigers. This did not mean that the tigers couldn’t smell, hear or other tiger-sense each other.

(T)here is meaning in the animal’s world not because it is capable of fashioning an internal representation of an external state of affairs but because its action in the world is so closely and intimately attuned to its perception. (Ingold 2011a, p. 79 paraphrasing von Uexküll)

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<sup>54</sup> This panel is visible in Image 37, on p. 148. The enclosure is a front exhibit with backstage access and is the *Watch where you step* exhibit on the Big Cat behind-the-scenes tour.

The beaks and feet, referred to by the keeper on the tour, are from opportunistic-feeding birds, pigeons mostly, that are too slow to evade a suddenly alert tiger in hunting mode. The keeper's narrative included all this information and positioned the tiger's flatulence and defecating as part of the behind-the-scenes experience, an experience not available to everyday, front-of-house, visitors. The matter being inhaled, viewed, avoided and trampled upon signified an exceptional experience, where the categorisation of, "fragrance and foulness must always be considered within a specific cultural context" (Classen 1992, p. 161).

Assiqa and Tuan provided something extra-ordinary for westerners: tiger aroma, the crack of bones, and an underfoot squelch derived from captive excreta / urine. We felt, smelt, heard and saw these affordances of the tiger's habitation within this exhibit, through the soles of our feet touching the inner parts of our footwear, through the sound of stickiness and crunch in movement, through breathing, and, when stepping, in the give and then drop in height concomitant with the 'crack' of sound. We experienced a snapped beak, the rising waft of shit, the quick sidestep to avoid most of the ooze, and the inedible, gnarled, feet of consumed pigeon resisting our steps: an experience of the affordances of sensorial surrounds *par excellence*. As just one more earth Other, our human actions were perceptively *closely and intimately attuned*, as Ingold understood from von Uexküll (2011a, p. 79).

Recognising that our perceptions are not confined to any one sense but an amalgam of movement through *all* our perceptive equipment acknowledges our sensorium as "mutually conditioning relations" (Ingold 2011a, p.9). The western categories of seeing, hearing, touching, tasting and smelling are replaced by a fusion of sensing, a relationality amongst senses, to best experience all on offer. This fusion obtains for the humans trekking the tiger exhibit as a tour, and later, when the tigers return to exhibit, for their sensorial investigation also.

In ordinary perceptual practice these registers cooperate so closely, and with such overlap of function, that their respective contributions are impossible to tease apart. (Ingold 2011a, p. 136)

When interpreting this experience (remembering that I am a western) if all I utilise is

Classen's aforementioned "fragrance or foulness" (emphasis mine 1992, p. 161) where the dualism explains human sensing of the tiger exhibit, this reduces the experience to smell, and human interpretations of smell at that. The keeper's first injunction *it really stinks*, places the experience within Classen's framework, but the keeper's further injunctions — including the inadequacy of builds that would put orangs into tiger habitations — together with the embodied experience, I would argue, break through this limited interpretation.

A contextualisation occurs where either / or reduces the senses not only to smell, but to only *human* smell. This interprets the behind-the-scenes experience as delivered to humans, for humans, and pointedly, about humans. This is an example of Ingold's inversion where absence / reduction / exclusion are produced, rather than "lines of ...generation" (2011a, p. 117). The daily life of the tigers (in this instance) inverts into the cultural context of human-only perceptions, once again a "narrow conception of thought" (Ingold 2000, p. 287). A relational, un-inverted interpretation allows more matter, space, and time (spacetime-mattering) into meanings being experienced. For example, we could consider the matter of tiger and lion shit at the zoo as displaying divergent, internal, digestive systems of the zoo category, 'Big Cats.'

In Immersion Hub (*ex-situ*), and in their home-habitats (*in-situ*), Big Cat excreta may well depend upon the gut bacteria of the animal defecating (*c.f.* Rose 2013, p. 20). Or it may be an entangled environment — jungle, savannah or zoo surround — to which these captives adapted or are adapting or emerge within / amongst. Or, it could be the bacteria within the local water supply, or the zoo meat that contains different bacteria from home-habitat (S.E. Asia for tigers, Africa for lions) prey that reacts differently with the cats' biome, or additional internal manifestations of manifold tiger / lion-ness that humans have yet to comprehend. The differences in Big Cat excreta are not just differences in human categories of good or bad smell; they are a fusion of sensing these outcomes by all and sundry — earth Others (internal and external to cat guts) and humans. Even to the birds that become Big Cat excreta, before their consumption. And these are just a few of the 'exclusions' on offer. Not everything can be included, of course, but dualisms perform these normative boundary-policing processes with no thought or inclusion as to the outcomes. Ingold, I contend, redresses this western-thought imbalance.



At the zoo, captivity is re-presented as an opportunity to educate people about Other life forms, and / or an opportunity to promote zoo conservation that redresses the wrongs of habitat destruction. But, by only perceiving the captives through the lens of human *cultural* knowledges, *real* knowledge is absented. I have instanced Classen to explain how, as an ethnographer, I could invert tiger shit and predatory behaviour, through western dualistic process. At the zoo, to market behind-the-scenes tours, the promotional narratives invert the lives of the captives to the static understandings of authentic and wow. The keepers' narrative keeps it (more) real, by including the limitations of human knowledge, in the builds, and the agency captive tigers demonstrate — through catching and eating birds — within their habitations.

Walking through the tiger exhibit on that tour engaged our bodies in an “evolving tapestry” of becomings (Ingold 2011a, p.9). We needed care in stepping, watching out where to put our feet, and experiencing feelings of excitement, of hearing the keeper's meaning, and not just ‘listening to words’ but also, swivelling our heads so that our eyes, ears and noses could take in what was being addressed. Occupying a place of fragrance or foulness was *not* my sensorial experience. Interpreting the experience this way would invert *my* perceptions by making, “(l)ife.... reduced to an internal property of things that *occupy* the world but [that] do not... *inhabit* it” (Ingold 2011 a, p. 145, Original emphasis).

Later, moving through the next behind-the-scenes Big Cat tour section, the lion enclosure, visitors sidestepped lion urine puddles, which are indented onto the hard, earthen-floors. Puddles, not ooze, are underfoot in the African Big Cat surrounds. The lion surrounds, like their excreta, are a home-habitat world away from tigers. The behind-the-scenes visitors partake an alternate sensory surround, where puddles replace ooze, and spacetime matters are of different becomings. The lion lodgings are over a hundred years old with spindly trees and out-in-all-weather but heated (in winter) concrete plinths, with small caverns below, providing the lions' shelter. These lodgings provide a stark contrast to the tiger front exhibit.

This juxtaposition of lion and tiger enclosure is traversed in behind-the-scenes tours, one after the other. Out front, and for everyday visitors, these enclosures are in different

'sections' of the zoo. They sit next to each other as matter, but the winding public footpaths interspersed with built greenery architecture, separate them from direct comparison in the public arena. This is not so for behind-the-scenes visitors, who are privy to the proximity of, and with, the Big Cats.

## **Lions**

The lions' quarters of iron bars and separated, but open-able, 'cage' doors are some of the oldest captive quarters at the zoo. Visitors are often dismayed standing surveying these structures, and would ask volunteer guides, "Why are the lion cages so old and small? Some of the animals have beautiful cages. Why not the lions?" Guides are advised to answer with facts about Monarto Zoo and the pride of lions in the larger-than-this-whole-zoo exhibit, and the conservation perspective of the Royal Society. When zoo finances are brought up, as I once attempted when under such questioning, one person rolled her eyes at me. I concluded with: "the keepers do the best they can. And I can honestly say they love their charges and their jobs." Whilst thinking to myself, *but not the pay!*<sup>55</sup>

This old lion exhibit of hard earthen floors, iron bars and linked, but separate enclosures, presents as an anachronism to most visitors and volunteers. On my first Big Cat Tour, as a paying visitor, in my notes I described the Lion's quarters and their effect upon me:

Up to this the time we had been in the night-quarters of the Sumatran Tigers, and during these encounters we had been within acoustic range of a strong, loud, but distant 'banging' that came from behind the thick, old, concrete entrance to our right. Now we turned our attention to the mesh gate, nestled deep in this concrete frame and set under the tiger's plinth.

The thumping we had been aware of turned out to be the lions in the next exhibit. They were pounding on their doors, pushing their weight against these old, metal-framed gates to alert humans to their presence (I anthropomorphically presumed).

The keeper disappeared under the platform at the back of the tiger's day quarters,

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<sup>55</sup> "Zookeeper wages have ...remained stagnant even as job requirements have demanded increasingly higher levels of education, work experience, and skill" (Grazian 2015, p. 276 note 31). He also notes that the predominance of female keepers reflects the gendered 'nurture' pay gap (*ibid.*, p. 14 and p. 276-7 note 31).

opening a locked gate, and entering a tunnel.

I did not know that this was the layout of the two Big Cat enclosures. I knew the lions were positioned directly behind the tiger's large back wall. What I didn't comprehend was that keepers — and soon myself — were under where the female tiger Kemiri often paced or sat taking in the view and the visitor section that overhung into her area. This tunnel was unknown to me. It was thrilling!



Image 39: Lion Tunnel entrance and behind-the-scenes cross over point between tigers and lions. Kemiri sits above in her front day exhibit, while the gate is the entrance to the 100+ year-old Lion tunnel below.

The corridor inside the gate was long and low and dark. It stretched away to a small slit of light, discernible some many metres away, at the end of the corridor. This is where the unseen, but persistent, female lions were wreaking havoc on the end-of-tunnel, metal, gate. The keeper said to us, “I have to check it is all closed and locked

up. I'll be back soon." He hurried off to check the metal gates and locks along the dark corridor, while we waited this side of the mesh gate. When he returned, we all followed him into the narrow, low, dimly lit, corridor. "This part of the cats' quarters is over a century old," he informed us.

Two yellow, but fading and in need of a repaint, lines were marked on the pocked, cracked and uneven concrete floor. Large water hoses, buckets, rakes, shovels and bowling balls (lion enrichment-cum-soccer balls) and other detritus, lay on the floor.

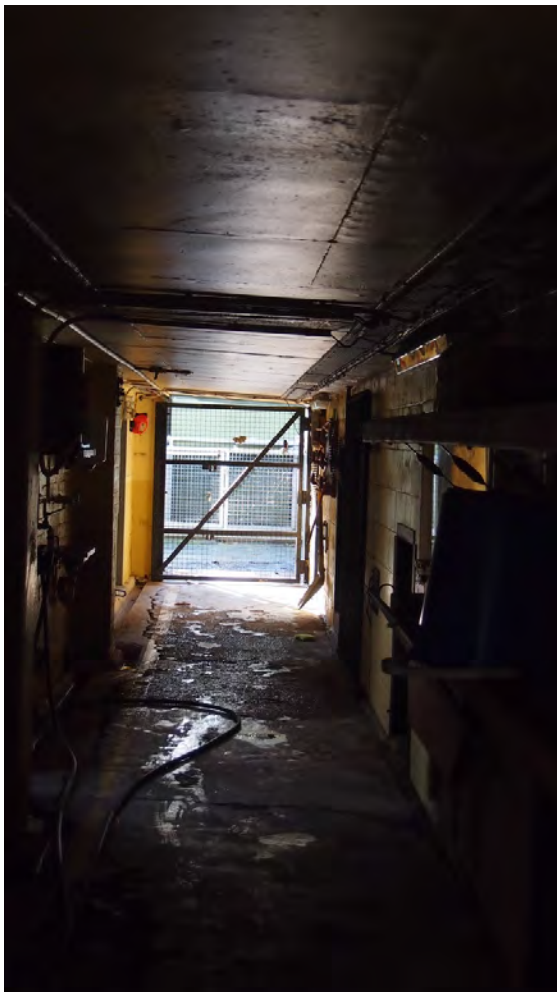


Image 40: Within the tunnel and looking back at the entrance to the tunnel.

Everything was stacked against the low sidewalls to allow our access to the uneven walkway. As a visitor in a wheelchair went through before me, I could see the trouble her wheels had in negotiating the uneven floor and narrow clearway between the detritus.

As I followed the wheelchair into the corridor, walking slowly behind, I drew level with a second gate into the lion enclosures. I became aware of a large presence to

my right, through the half-panelled metal and bar gate. Just as quickly as I noted this, 'it' (the presence) was gone. When the visitor in the chair abruptly changed direction and entered the next gate to her right, I followed. We were suddenly in daylight, and inside a lion enclosure. This middle enclosure stood between the two female lions, Amani and Yizzi, (sisters) to our left, and the male lion, Mjumbi, to our right.

It had been his quick movement that had me sharply turning my head in the corridor. But seeing and smelling nothing, I had moved on. My heart beat a little faster as the fact that this movement / presence had been Mjumbi, checking us out before we moved into the day enclosure next to him.



Image 41: Mjumbi awaiting a rib

Once all the visitors were standing inside the middle enclosure, the volunteer guide handed us plastic gloves, so that over the course of the next 15 minutes we could feed the lions bloody, lean, horse-ribs. The visitor in the wheelchair fed Mjumbi. On the other side, at first, only one female lion came to the mesh to get her rib. The keeper kept up a narrative of information throughout the encounter. He told us the names of the lions, their relationships, age and disposition. "This is the dominant female, the other will come up when this one sits down to eat."

Our small, highly alert, little group of humans took this information in. Sure enough,

as soon as the lighter shaded female lion had her rib and retired to munch on it, the darker shaded female lion came up for hers.

I had fed the lighter one and as I did so the keeper informed us that, “the tigers are patient and not so demanding. Lions get in your face about things.” (Hence, the clamour made against the gates to tell us — anthropomorphically projecting my reasoning onto them — that they were WAITING).



Image 42: Lion exhibit with heated (green) plinths and ‘cave’ below. Our entry door to the tunnel is open in the back wall.

The keeper seemed to have enjoyed the tigers more, I thought. But, having a large, female, lion stretched out and leaning / hovering over you, delicately picking out a rib to rip through the interceding mesh, was astonishing. The guide took photos, and then held visitor’s bags and cameras while visitors took photos. Too soon it was time to go, and the keeper, although patient, was moving towards the exit as we were all posing for photos, chatting, and enjoying the moment.

We re-entered the long, dark, concrete corridor again and stopped to peek through the second gate at Mjumbi sitting on the ground gnawing on a rib. The keeper explained the white board, hanging on the corridor wall that charted a few months of undulating patterns of the lions’ weight. Re-tracing our movements back out into



Image 43: Feeding a female lion

the sunlight, near the tiger backstage area, I thought this was a revelatory place for me to encounter. It must be difficult to work in here — cramped, cold, and dark in winter, hot and muggy in summer. Or maybe it was cool during the blistering heat of an Adelaide summer?

This ends my notes on a paid tour, taken before I began guiding behind-the-scenes events. I became accustomed to the low, dark corridor with a tiger (possibly) sitting on top, imperceptible to us (but probably well aware herself of our presence below). I pointed out the tiger proximity to visitors — or at least the possibility of a tiger above — on many behind-the-scenes occasions. Visitors, who purchase behind-the-scenes Big Cat tours, experience the thrill of traversing the dark tunnel —with a closely watching lion, literally, a couple of feet away — as happened to me. I experienced an emotional pulse entering the tunnel and then again upon realising what the presence near me had been. The space had me on high alert sensorially and emotionally. For me, this was “an emotional and sensorial engagement with the space of fieldwork” (Dundon and Hemer 2016, p. 5).

Visitors, though, often referred to the limited, aged, and barred area allotted the lions. Although robust, the antiquated and decrepit barred, meshed and earthen-floored lion ‘enclosures’ are anachronisms from another age in most people’s freely offered judgements. Sentiments ranged from disgust to dismay at the plight of so obvious an unimproved lot in life for these captives. These are responses to being entangled experientially within “emotions, senses and spaces” (Dundon and Hemer 2016, p. 2),

and where I, as the ethnographer, was attempting to comprehend the meanings being emoted. Pointing out the *best practice husbandry*, and the *larger than the whole city zoo* enclosure enjoyed by their lion conspecifics at Monarto some fifty miles away, did not alter the perception of most people I encountered.

Teaching volunteers to speak ‘alternative’ narratives or to refer to ‘enclosures’ / ‘exhibits’ during training is an attempt to move the meaning on from past zoo significations. Bygone meanings of ‘caged’ animals, where colonial feats of control or 20<sup>th</sup> century spectacles and entertainments, were the representations that aligned with the past encompassing culture’s contemporaneous space, time and matters (Anderson 1995, pp. 281-282; Hallman & Benbow 2006, p. 257).

Today these are disparaged as ‘ye olde world’ thinking at the zoo. In the more recent zoo habitation-builds, where open viewing, and no concrete or bars are perceptible, the signification of ‘enclosure’ or ‘exhibit’ flows and enmeshes the sights, sounds, smells and movements witnessed by people (Grazian 2012). However, when the built environ has remained static, as has the zoo’s lion habitats, the bars, mesh, locks, hard-packed earthen floors and concrete (in the dark corridor behind) hardly connote latter day, progressive-time, representations. There is a jolt between the reality and the representation of how lives emerge in captivity. The human hierarchies being enforced become evident during such encounters. For example, finances and decisions made with this as central are clearly evident in everyday, lion-at-this-zoo existence: and it is the lions that pay the actual costs of this accounting of their existence as *only* nature (Gleeson-White 2014, p. xv).

This first Big Cat tour was when *I* also realised that the three lions have no night-quarters at the zoo. My notes summarising numerous referrals by behind-the-scenes and everyday visitors to the zoo is marked because these speak to the inadequacy of the lion quarters. The age of the lion enclosures, the obvious repairs upon repairs, the limited amount of room and the mesh and bars of their surrounds concerned people. No attempts to recreate home-habitat allusions have been made for these captives. Volunteers offered the lion and giraffe enclosures as the most ‘in need of refurbishment’ when I asked this pointed question. The concrete and bars of the state of art Tiger Immersion Hub night-quarters



and the bars, and hard floors of front enclosure lion exhibit, display new and old residences respectively, the difference between them is the alternate narratives attached to them.

At the zoo, progressive time is currently based upon captive wellbeing *derived* from human control. The “issue of the humane is bound up with technological development at some level” (Burt 2001, p. 222). Animals reveal human progress through human-powers of manipulating matter where, at the zoo, captives are, “locked into discourses of health, moral improvement, conservation, and vitality” (Burt 2001, p. 206).

Animals are good for signifying the latest western ‘take’ on reality (Anderson 1995; Burt 2001). Burt (2001) explores animal historical-visual representations in human techne; film, slaughterhouse and zoo. In film, animals are edited to leave out the boring, while historically slaughterhouses censored pictures and prevented access by children (Burt 2001, p. 208). In zoos, captives were once deployed for entertainment and laughs (chimp tea parties or animal rides, for example) while currently they are symbols of solemn, educative resolves or as icons in ambassadorships. This elision of captive presentation (from once-upon-a-time tea-party to occupant of ecological theatre now) and the altered materials in which they ‘perform’ zoo (from yesteryears pulling carts to iconic pictures of wild, endangered, conspecifics strategically placed around the zoo) is how captives help achieve zoo progressive time, where, “(a)nimals become central figures in the presentation of new and “progressive” technology” (Burt 2001, p. 206). In this way, Other life forms become mediators, symbols, of human power. They are within Ingold’s perspective of westerns’ using a “narrow conception of thought ... [that reduces] ... the world to a realm of manipulable objects” (Ingold 2000, p.287). At the zoo, representations allow movement and change in static categories, including the categories, ‘captive,’ ‘human exceptionalism’ and ‘human techne.’

The outcome is that captives remain captives however represented, yesteryear or today. Meanwhile, humans remain exceptional to all other matter/s and in control: only the symbols, the representations, change. In this way, animals are resources of change for a motionless, seemingly irremovable, western, belief in human control. The, “ongoing presumption [is] ...that the animal can be *known* in the form that humans elect to display

it” (Anderson 1995, p. 290, Original emphasis). The meaningful experience that visitors seek at this zoo however does fail when the representations fail to cover the presumption. That is, people recognise the limitations of humanist ‘economic only’ thinking when experiencing the outcomes for captives; a breakthrough moment that guides, too, experience. Other times, comparisons do not challenge normative humanist thinking.

## **Comparisons**

### **Orangs**

An examination of past and present Orang zoo exhibits reveals narrative representations altered to align with humanist presumptions. I well remember a Bornean Orangutan named George, who was renowned amongst the local populace during my childhood. Today, outside of the Envirodome building, there is an iconic sculpture of George. His cage was somewhere around this juncture and the walls of the building were the walls of his home. He lived at the zoo from the mid 20<sup>th</sup> century until his death. I remember him sitting behind bars, on a concrete floor with a tyre hanging from the ceiling; he had spread a hessian sack through his bars onto the ground, outside of his quarters. Children were encouraged to throw lollies and other treats onto this sack. George would then pull this ‘loot’ through the bars and enjoy his sugar overload. It was, I remember, exciting to watch this unfold, having thrown my lollies onto his sack. Many older visitors remembered George too, and reminisced about these consumable interchanges during fieldwork. Lila, a behind-the-scenes guide, spoke of George with affection, and with candour about people who visit the zoo.

People come to the zoo still wanting to see him. He died in 1976. But people just assume that the zoo is the same all the time and that George is still going to be there. He is in part. His skeleton is preserved in the old Elephant House. But George himself is not here. But you remember what he had? A concrete floor, bars, a tyre hanging up, a hessian bag that he threw out for you to throw peanuts on. And that was about his entertainment. And ... he had very little hair left on him, because of the hard surfaces that he dealt with. Nowadays, earthen floors, moats — either wet moats or dry moats — as a division. That keeps the animals secure. People always think it is keeping the animals so that *you’re* secure. But quite often it is keeping the animals secure from the public, because you’ve no idea what some people do. And so, it is far better that they have a distance between the animals and the public, but

[with] a clear viewing area over a moat, which is pretty much the best way to go.

‘Training with Karta and Kluet,’ the Sumatran Orangs in the Immersion Hub during the Primate behind-the-scenes tour is reminiscent of observing old George with his probing gaze. During the Primate tour, I am watching back at another ‘captivating’ primate, as they are enticed and or trained with food, in front of and as an educative session for paying visitors. Keepers’ train the primates whether visitors are present or absent, as this interaction is also designed to stimulate captives and make health observations. However, Karta and Kleut’s material surrounds in their lockable night-quarters, behind the front exhibit day quarters, are strikingly similar to George’s barred home with concrete walls. The current captive orang pair spends the hours from closing time until keeper attendance next morning in concrete and bars.



Image 44: Orangs night-quarters, with the yellow lines for behind the scenes tours.

Events do alter these hours, for example, behind-the-scenes tours, veterinary visits, illness / pregnancy or a myriad of human / captive occurrences. However, generally, the night-quarters can be occupied for up to fourteen hours a day dependent on the species, the keeper, and the day’s activities.

These hours are spent on concrete floors, between concrete, bars, or mesh ‘walls,’ and in winter, on heated sleeping ledges. Old tyres hang from ceilings, blankets, quilts, sheets and towels are dotted around the place, half eaten foodstuffs, freshwater supplies spaced

at various wall outlets, and ubiquitous shit and urine. The Orangs backstage is air-conditioned and numerous ‘rooms’ allow keepers to separate out the captives for regular health checks or during times of pregnancy and illnesses. In nearly all these matters backstage quarters remind me of George’s front-stage lodgings. Except, George had no air conditioning, and the treats, offered by keepers and visitors’ fifty-odd years apart, have altered radically in line with the ‘health’ messaging representations of captive well-being. In all other matters, and to my perception, the backstage 21<sup>st</sup> Century oranges and the mid 20<sup>th</sup> Century George inhabit the same concrete, barred, utilitarian captivity.



Although many volunteers and visitors remembered and spoke about George and remembered his ‘cage’ with hessian sack, and hanging tyre, no one ever commented on the similarities between current backstage orang life and George’s time at the zoo. It wasn’t until well into my fieldwork that this comparison even occurred to me.

Image 45: A bust of George the Bornean Orang, a childhood favourite.

Today’s backstage surroundings, narrated as ‘state of the art’ to demonstrate conservation and care, are the material manifestation of human exceptionalism and control. For reasons of cultural complexity, as discussed above and below, the concrete and bars have migrated to off-viewing backstage night-quarters, whilst the front-public viewing area is a manufactured nature, Andersons’ ‘ecological theatre’ (1995, p. 289), dependent upon the home-habitat of the captive thus enclosed. As Grazian (2012) points out, zoo exhibits are purposefully *created* nature because of competing, culturally encoded, demands.

(Z)ooos ... present aesthetically *attractive* animal displays while adhering to scientifically *accurate* and thus edifying renderings of the natural environment and its ecological realities. (Grazian 2012, p. 549, Original emphasis)

Grazian (2012) conducted fieldwork in USA, where the capitalistic, market-world demand of cost effectiveness, visitor expectations, and animal lives are also all zoo-entwined meanings. In order to meet conflicting requirements, nature becomes a product of zoo culture.

Staging naturalistic zoo exhibits ... requires that nature makers negotiate among a variety of competing aesthetic and organizational demands. (Grazian 2012, p. 548)

Impression and animal management loom large in this enterprise, where categories proliferate so as to account for captivity today. Hence, captive ‘wellbeing’ means one thing to depict for paying visitors — home-habitat representations, and another for keeping staff — cleanable, utilitarian, concrete and bars. In this way, the “sensual / emotional / spatial dynamic” (Dundon and Hemer 2016, p. 4) of *Orang* life at the zoo is managed through proliferating representations of good zooing; eco-habitats to visitors and working conditions for keepers. The “environment has been engineered, or “built” to conform to expectations of closure” (Ingold 2011a, p. 115), but my memory of George broke through this ‘closure’ and left me questioning the new builds. Sensing, and the emotional responses to captive habitations these yielded, also occur in the other half of the Immersion Hub, where the tiger’s dwell.

### **Tigers**

The zoo’s Immersion Hub re-creates ‘natural’ home-habitat through vegetation choices, swimming holes, sloping lands, and viewable by the public captive sitting / resting / climbing places. Close to the tiger plate-glassed dive pool with its underwater view, is a small, metal plated opening, where keepers, from the safety of backstage, can place food on a rock. This food placement encourages the resident tiger to sit and consume food directly in front of visitors. This is an exciting spectacle: up close and eye level, a large predator rips and consumes flesh then gnaws on bone.



Image 46: Immersion Hub Tiger exhibit with water feature to separate captives and humans.

When this exhibit first opened, one volunteer, Betty, had doubts about its reliability to keep the tigers within its walls. She remembered an article she had read about a tiger in a US zoo that had been taunted by some teenagers who straddled the enclosure. The tiger had launched herself at these people and managed to grab an overhanging human leg. Betty remembered that the San Francisco Zoo tiger-exhibit:

... was apparently thought to be like our enclosure here: open. No wire or anything out the front. [It was] ... thought to be secure, sufficiently secure, and the distance was right. [The zoo] thought it couldn't jump [that distance]. But these young lads were taunting it.

....

All round the world, they had to reinforce their [tiger] enclosures. As a result, they increased the height of some of the [Adelaide Zoo tiger enclosure] mesh. I am not sure whether that was when they put some of that 'hot wire' on that rock. When they first opened that enclosure in Immersion, I was actually terrified. Every time I went down there, if there was nobody else around... you'd see this tiger, and you'd think. *Well, you know, I am a nice little morsel.* And if there were other people there, I would stand behind them. It took me ages before I would go down there on my own.

The escape-episode this volunteer was remembering occurred in 2007. The female Sumatran Tiger at the San Francisco Zoo was shot dead, having killed one teenage male and mauled another. A third teenager hid and alerted staff. The news online debated if the captive was being taunted, and, subsequently, the zoo was charged, “for violations associated with the flaws in the tiger enclosure that allowed Tatiana to escape” (‘L.A. Unleashed’ 2011). Betty remembered the San Francisco event and the subsequent tinkering with *her* zoo’s mesh and electric wiring in Immersion Hub. Her rational and emotional response was one of terror.

Sensory aspects to space and people's emotional responses to them shape the physical and emotional landscape, so that moving beyond the experience of, and links between, people and place, the constitution of spaces is central to human experience. (Dundon and Hemer 2016, p. 11)

The representation of public “nature making” exhibit, where the rocks, greenery and water created a manufactured reality combined in this volunteer’s memory with a similar exhibit and this particular species, which resulted in an emotional, visceral response and subsequent spatial avoidance behaviour.

There are different representations that occur backstage at Immersion too. These representations are entangled with a plethora of concrete, bars, pulleys, lockable openings and heated concrete sleeping quarters. Backstage / night-quarter representations are logical, reasonable, market-world implementations, where hosing down concrete, scrubbing stained walls, and utilising antiseptic to prevent disease are strenuously followed edicts. Disease transmissions are costly in finances, time (in keepers’ terms and view-ability in captives) and captive lives, and therefore efficiency is assumed as best practice and given primacy. A different category / representation of ‘captive well-being’ nullifies home-habitat nature making, which links zoo-space to wild-space, with ‘well-being’ denoted as care and responsibility for health as prime; either way the human knows best, zoos are getting better, and captives remain captive.

To me, it seems backstage tigers live very much like front-stage lions at the zoo, but people’s concern over the lion 24/7 quarters is not matched by a concern over night-quarters for tigers. Both Big Cat species have minimal accoutrements of home-habitat in

their night-quarters. Tigers spend on average 12-14 hours in their night-quarters, while lions' dwell 24/7 in these minimal conditions. They both have attentive keepers to clean, feed and care for them. The representations being utilised to maintain these alternate front and back areas are based in humanist logic, which works "by turning occurrences into discrete, self-contained facts" (Ingold 2011a, p. 155).

The 'occurrence' of capturing / breeding and enclosing exotic life forms required a different set of 'discrete facts' to speak against the mid Twentieth century turn against animal cruelty (Anderson 1995, Hallman & Benbow 2006, p. 261). Today, conservation and education are the alternate representational facts to spectacle and entertainment. Humane animal treatment equates to manufacturing representations of captive well-being, albeit with various well-being representations emerging. Representations of Sumatran Tigers, for example, omit — or at least under specify — references to the distances these animals wayfare in their home-habitat, *in situ*, lives.

These two comparisons between captive's lives front and backstage currently and, in the past, demonstrate the utility of representations that allow movement — or what appears as change — in static categorisations. One volunteer offered insight into representations at zoos in general and this zoo in particular.

You can go to a place like [names a local South Australian wildlife park] ... which I like. You see the awful cages the Big Cats are kept in. You say to yourself; *they shouldn't be in those cages anymore*. Even though, from the point of view of a cat, it probably is quite comfortable. It just looks to us to be 'wrong.'

The worst experience in any zoo I've ever had was at Taronga Zoo in the mid 60s, I guess. There was this concrete box effectively, a concrete pillar with a box on top, not very deep, a fruit case [with] a possum curled up in it. It was great from the point of view of the visitor [who]...could see this animal, but no possum in its right mind would be sleeping out in a block of wood in the middle of the day, *if* it had the choice of somewhere else. I've never been particularly upset that it was a concrete enclosure, because we tend to forget why people brought in concrete enclosures. Previous to concrete, disease was rampant. Concrete was a lot easier to clean... after the 50s and 60s ...when antibiotics became available, it's been possible to move back to this more naturalistic exhibit. But at the same time, we have also



reduced the number of animals you have in that exhibit and also, of course, the animals aren't just taken from the wild and put in the exhibit. Volunteers, as their work as guides, try and get these messages across. Times change. I've always thought that Adelaide Zoo is pretty up with it. Every zoo has corners that you would prefer not to have. Usually, because you don't have enough funds to do the things you want to do with them. Adelaide Zoo has always tried to be at the forefront of what zoos should be doing and can do very well. Which is exhibiting animals in fairly naturalistic conditions nowadays but getting messages out these days. The message is conservation.

We have problems in saying to a person... [about] the Tigers...it's lying there snoozing in the corner. But people want to see 'action.' So, you need to be able to explain to them *that is what a tiger would be doing if it were in the wild, it would spend most of its time snoozing.* We want it to mimic that...you need to be able to give people an experience, which is an interpreted experience. That's how *I* feel. Most people come for relaxation, so you should be pleasant as well, but if they can get a nice message at the same time, that's a bonus. (Murphy 2006)

The utility of zoos changing, to better address the needs of the larger culture, is prime for this volunteer, who argues for an interpreted 'guide' message to overcome the lack of 'action' by captives, and to explain the past use of concrete and for its relatively recent disappearance, front of house. He also interprets the finances as pivotal for the success of reproducing a zoo and articulates an understanding of the basic reasons for attendance, of paying visitors, as relaxation and enjoyment. That is, he expresses the normative "cultural modelling of a given reality" (Ingold 2011b, p. 326), usually promulgated by zoo management.

The representations, or symbolic meanings of zoos, perceived by someone who volunteered at the zoo for years in many capacities, speak to the *need* to change the reasons for its existence. He accepted the need for anthropomorphic representations, for without the changes these allowed, the failing presumptive anachronisms would probably mean the end of a viable zoo. This volunteer, however, also addressed the unexpected predicament of the representational changes for the life forms entangled in human 'builds' for the term of their captive lives. He argues that where front of house enclosures, at the local wildlife park, do not measure up to the representations currently

promulgated as best practice at the zoo, dissonance results for humans, but probably not for the Big Cat living there; an *unknown* unknown I would argue. However, at the zoo, it seems the entangled lives of captive animals *and* humans are “constrained by market competition, budgetary limitations, organizational efficiencies, professional norms, audience expectations, and demand uncertainty” (Grazian 2012, p. 562).

Confronting the presumption of human ‘control’ and breaking through the normativity of humanistic thinking means accepting we do *not* know it all. What is accepted (by humans) is that captives emerge in human built environs, where their worlding, from birth to death, is in captivity. A useful-for-humans pragmatism that is perceptible in many experiences at the zoo.

### **Conclusion**

The zoo utilises adjustable representations to mediate the meanings of their captive collection. These allow meaning-movement within the lived stasis of captivity. Management promulgates ‘best practice’ narratives through education and conservation. These representations are the current zoo worlding of human progress and control. Captives emerge in the constructed spacetime of human control, adapting and sometimes breaking through, or, as Karta did, by breaking out. Humanist presumptions of control and progressive time produces confounding realities within ecological relationships. This is where some volunteer’s ‘world’ through sonic dispositions and visceral memories, practicing an active and attentive engagement with various captives, and in so doing, processing meaningful experiences. So, too, in behind-the-scenes tours, visitors sensorially engage with captives and captivity, often in search of meaningful experiences, albeit, formed upon an economic impetus.

Representations, used to re-categorise limited understandings of ‘becoming’ relationships, often go unquestioned. For example, a comparison of captivity past and present reveals many material similarities between yesterday’s cages and today’s exhibits. Comparing George’s mid-twentieth century life at the zoo with the current Orangs backstage life reveals many similarities. As does walking from front to backstage during behind-the-scenes tours. The changing narratives of these representations mediate

the meanings between the “ecological theatres” (Anderson 1995, p. 289) out front, and the utilitarian-sanitary residences backstage.

Utilising a theoretical perspective of habitation and wayfaring (Ingold 2000, 2010, 2011a) as a *relational* universe, reveals the zoo’s captives ‘becoming’ under logically imposed human concepts. No matter the age, condition or actuality of the captives and their surrounds, the representations only construe these matters as in control and progressing towards a better zoo. By choosing to interpret perception as an unfolding process of action and sensing, the category of ‘nature’ at the zoo reveals breakthrough moments that confound representations of progress and control. A plethora of movement and meaning, of wayfaring, becomes apparent. What emerges is the reality of a life lived in captivity and the myriad actions and meanings people juggle to reproduce ‘zoo.’

In the next chapter, the reality of zooing, as articulated by management and experienced by my interlocutors, is examined diffracting them through Barad (2007). From an understanding that all matter has agency, that is, “agential realism” (Barad 2007, p. 225), emerges different understandings of progress. This prompts questions around western quantifications in general, and the metrics of zooing in particular.

## *Entangled at the zoo*

...ethics, that is, matters of justice,  
are never secondary or derivative concerns.  
(Barad 2011, p. 450)

### **Introduction**

In this chapter I will use the toolkit of Karen Barad, a physicist, feminist and posthuman scholar who queers the boundaries of western representationalism through exposing the limitations of its adherence to individualism, progressive time, human control and exceptionalism. Using Barad's posthuman perspective means altering the presumption of our separation from all else, the nature / nurture divide, which also alters the questions we ask. Instead of enquiring into 'things' or categories and asking questions about what defines or is essential about this thing / category, that is what attributes 'it' possesses, Barad seeks the processes and practices that activate the idea or impression that something exists. This is a physicists' relational perspective to comprehend matters — including the matter of lives at the zoo.

The point of challenging traditional epistemologies is not merely to welcome females, slaves, children, animals, and other dispossessed Others (exiled from the land of knowers by Aristotle more than two millennia ago) into the fold of knowers but to better account for the ontology of knowing. (Barad 2007, p. 378)

Barad addresses the human exceptionalism of western belief together with the exclusions it entails. By applying knowledge gleaned from quantum understandings of reality, she applies diffraction as an alternate apparatus to reflection / reflexivity / representation, to access the reality of matter/s entangled becoming. Diffraction, entanglement, and becoming, are explained in detail throughout this chapter with the aim of showing how we live in a relational universe. Another physicist put this well, arguing that Quantum Mechanics:

...does not describe things as they *are*: it describes how things *occur* and how they *interact with each other*. It doesn't describe where there is a particle but how the

particle *shows itself to others*. The world of existent things is reduced to a realm of possible interactions. Reality is reduced to interaction. Reality is reduced to relation. (Rovelli 2016 (2014), p. 115, Original emphasis)

At the zoo, the presumption of human interventions into other animal's lives is normative, that is, taken as 'natural'; it is reality. This taken for granted presumption of our reality is based upon our understanding that humans are in control and can manipulate matter, or intervene in matters becoming, and measure the success (or otherwise) of outcomes. Over the last 130 years this particular zoo has kept this presumption intact but altered the narratives around *why* humans intervene in the lives of other animals. This sense of dominion, the western concept of being in control, of being able to do these 'things' and thus display progress and prove, through various metrics that 'civilisation resides here,' is the representation being unpacked. It is *within* the zoo, between the people who regularly attend (paid and unpaid) and the official representations — interstitial understandings — where various differences that come to matter are examined.

### **Arrangement of chapter**

I begin by studying the zoo's organisational structure through the staff titles and ranks given in various publications, because where people are placed within the management system seemed like a good place to start. However, by understanding the workplace *without* access to official versions I garnered insight into keeper / keeping beyond mere rank. I then examine implications of performing zoo when change comes around. The examples include matters such as land, exhibits, captives and pleasure as articulated by keepers, volunteers and management. Next, by diffracting official zoo priorities, as articulated by the CEO, Board President and others *through* each other, diverse meanings of progress emerge, as do exclusions that make the category being represented fit the narrative manipulation. Following up on this insight I explain the contradictions inherent in conservation efforts as they pertain to Giant Panda emergent life. The zoo's pandas are a significant, exotic, Other, life form, and their particular manipulation highlights the problem of 'being the thing represented' entangled within zoo narratives, and the metrics implicated in producing these narratives. I take these insights further by exploring the effects on keeping, where conservation representations do not always fit with keeper perspectives. More broadly, I then move to considering the scale and effects of inter/national and zoo governance bureaucracies on keepers / keeping, and consequently

upon the captives. Next, I make an appraisal of quarantine bureaucracy, and Australian zoos' regional monoculture problems, which are diffracted through a particular species kept at the zoo, and the experience that ensues for certain captives. Throughout these matters, in house concerns about zoo conservation efforts and spectacular-ism surfaces, albeit in altered formations of 21st century 'human progress.' Finally, relationships between humans and humans, and between humans and Other life forms, are shown to be entangled becomings with no determinate outcomes. Emotional responses to different rounds, volunteer training requirements and relationships with captives, world the zoo differently to humanist logics.

Throughout this chapter patterns of representations utilised by the zoo recur, and the exclusions of matter and meanings are as constitutive of the place as the inclusions. Contra to representationalism as an informing practice:

...there is a deep sense in which we can understand diffraction patterns — as patterns of difference that make a difference — to be the fundamental constituents that make up the world. (Barad 2007, p.72)

Utilising diffraction means a “commitment to understanding which differences matter, how they matter, and for whom” (Barad 2007, p. 90). Of note at the zoo is that care and concern, while prominent and followed through, are separately classified / represented from the 'facts' that undergird most activities. In other words, whilst emotions are addressed, rationality prevails: a pattern that shapes life's emergence at the zoo.

### **Bodily boundaries**

The structure of departments, or keeper 'rounds,' eluded me for some time. I had requested a copy of whatever information was available from my contacts in management, but it never materialised.<sup>56</sup> Taking the initiative, I plotted the staff titles and activities in the weekly emailed and online staff / volunteer newsletter *Keeping Track*, the (approximately) monthly volunteer-only newsletter *Catch-Up*, and the snail-mail, thrice yearly, members magazine, *Zoo Times*. I went through back issues where I could source them and built up quite a data set. I was seeking the ranking of people and

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<sup>56</sup> I had one main 'gatekeeper' who had multiple jobs. She was pleasant, but to the point. I stopped enquiring about a copy of the Societies 'workplace structure,' and accepted the lack of codified categories — at least in printable, handover, form.

the boundary making that this entailed in keeping work. Of course, this also entangled the captives, volunteers and how numerous other ‘things’ came to be.

Some weeks, in the emailed newsletter, people were referred to as working for ‘Conservation Ark’ and then alternated between that and Zoos SA or Adelaide Zoo. For example, titles for one employee over a four-year period (June 2004 — July 2008) in the *Zoo Times* member’s magazine ranged from Curator Adelaide Zoo, Manager Life Sciences Adelaide Zoo, Director AZ, Director Zoos South Australia, Director Conservation Programs RZSSA, Director Zoos SA and, finally, to Director Conservation Programs. This person may well have held all these positions, with the title changing to reflect different aspects of their work. However, this one example reflects the overall amorphous nature of the organisation’s title / location / activity paradigm that I encountered whilst researching. Either the categories were not fixed, or little attention was paid to them. I still do not know which of these statements is more accurate or if some other essentialism was enforced about which I knew nothing. Some information on the zoo’s organisational structure emerged, with Curator, Team Leader, Senior Keeper, Keeper and Junior Keeper emerging as appropriate ‘categorisations’ or boundaries for hands-on, captive-workers.

The keeping staff also articulated a lack of policed hierarchy, whilst acknowledging the ranking system — and thus the level of remuneration — but spoke more about the importance of experience and camaraderie in their job. For example, Junior Keepers and volunteers referred to experienced keepers, who shared and taught their skill set, as an appreciated and respected cohort. In this way, the lack of care around producing a piece of bureaucratic paperwork on hierarchy became physically experienced as care directed to what mattered to people who work with captives.

The practices and processes of captivity were valued, and what was hoped to be excluded — rank, paperwork and non-captive work — was iterated and responded to as mattering less. I eventually understood that keeping was thought of as a fluid process, or practicing responsiveness, rather than hierarchy and narrow accountability. Keepers articulated that no amount of exceptional ranking or paperwork prepares people for working with other life forms, that is, “knowing does not come from standing at a distance and representing

but rather from *a direct material engagement with the world*' (Barad 2007, p. 49, Original emphasis). Further, keepers practiced a communal, sharing, downtime where tea breaks and lunches were not staggered but a 'tools-down' period, with people spending time with one another and catching up on captive and various other work issues. This occurred either in the backstage kitchen-offices (with access to kettles, microwaves, and fridges), more publicly in one of two zoo cafes, or at various 'picnic' tables in public areas around the zoo.

### **Material engagements**

The complexity of material busy-ness in one particular kitchen-office caught my eye as I sat down to interview a selection of keepers. My interviews began with the Team Leader, Beverley. It was she who had suggested her entire team could be interviewed during breaks, and not just herself. People wandered in as they turned up for their break and were offered time to stay and opine on their work, the team, and the zoo. All but one person took up the offer.

Sitting interviewing people at a long, central desk, in an asymmetrical roomier-than-most kitchen-office, I took notes and listened for openings to more insightful questions that could be posed to this small group of willing participants. The table held copious magazines and brochures. There was lots of disarray but no 'dirt'; it was a clean but untidy space, well used and knock-about in its presentation. This, I came to understand, is the standard operational keeper 'backstage' set up.

The sometimes one-on-one, sometimes 'group' interview of keepers that took place on this particular day was illuminating about the entanglements of keeping in some of its manifestations. I was speaking with a group that included supervisors (one Team Leader and a Senior Keeper), and peers (Keepers and Junior Keepers), about their home and work life, management / administration, visitors and always fore-fronted, the lives of captives. Beverly, as Team Leader, was forthcoming about the conditions and the teamwork required to achieve good animal husbandry on this round. For example, she spoke about how frictions could occur and the extremities of outdoor work.

Here, in the kitchen we have an air conditioner. We all hate the cold, which is nice, *when* we all agree. It only takes one person who doesn't and then it is different. On



the round, it is full on and it can get very, very hot, although in summer the food ‘work’ [preparation etc.] goes down.

Beverly then echoed other keeping-staff who lamented the previous CEOs administration, and its outcomes. She referred back to the days before his tenure, comparing the current zoo collection with its former capacities.

Eight years ago, we were much more connected [to administration]. It was a smaller place. A family zoo, staff was family... there was ninety staff. Then things changed; a hundred and thirty and now two hundred plus staff. We have lost a few animals, so there are animals lost and more and more [administrative] staff. We grew way too fast, and the city is just not going to grow. [That is] not Adelaide’s style. People call it a big country town in a big state, but not a big population. It is quite disappointing. The money goes to people and then *we* are told the money is tight. We lose animals and exhibits. We are the loser in the situation. We began with 80 (specimens) at the start and we are down to 52. And we have lost 50 specimens since I have been here. A zoo should always progress. You need to have a go.

Beverly attributes the reduction in specimen numbers on her round to the recent upgrade that included a new front entrance, perimeter fence and creation of a Giant Panda exhibit.

*It is a Big, Big, Big, gate, and we lost land [to the Adelaide City Council] when the outside area was developed. We are a tiny zoo and any loss is not good.*

Beverly’s reference to the square footage of the zoo — a metric of import — is significant because this influences the numbers of captives able to be kept on site.

The official zoo narrative about these changes is traceable through various past public announcements by the CEO, Board members and staff. In the official member’s magazine, *Zoo Times*, the heralding of this event was treated as significant with, for example, the July 2008 edition containing interpretations by both the CEO and President of the Board. The CEO underlined the economics and improvements.

We will all grow used to the sounds of construction over the next year or so, as the Adelaide Zoo is now the happy recipient of major financial support from the State

Government... an \$18.9m capital grant for the Zoo ... [which] means that after 125 years our lovely old Zoo will get a facelift and become much more accessible and welcoming to visitors. (West 2008, p. 4)

Image 47: Inside the old zoo entrance looking out onto Frome Road.



Image 48: The new Adelaide Zoo entrance on Botanic Park Drive.

A zoo Director, later in the same issue, deals with the more political aspects of the new fence and entranceway refurbishment, stating, “Gateway forecourts will create a better place for people to visit, gather and access Adelaide Zoo, while offering a significant amount of land back to the parklands and public use” (Evans 2008, p. 8)

The inspiration for all this activity was the zoo’s acquisition of two Giant Pandas from China, and in the original official zoo articles, all is upbeat and progressive. The return of land to the city council and Botanic Park, the original managers of the land the zoo now inhabits, was referred to by many keepers and volunteers during my research, 3-4 years after the opening. For example, another keeper, Michael, told me:

We lost a lot of ungulates when we got that front entrance put in: the zebras, the bongos, Oryx, black buck, the deer. It was pretty heartbreaking. That was an ungulate round just gone, disappeared. A lot of the keepers who looked after ungulates were pretty upset.

Another keeper also referred to this as the ‘lost ungulate round.’ One widely felt loss was a much-loved old aviary, and Shelley, a long-time volunteer, spoke of this past aviary as it was replaced by the front entrance and Panda Forest.

The geography of the zoo has changed. I used to have a very favourite spot, but it is no longer there. It was a big enclosure that had Cotton Top Tamarins and Macaws, and there were two seats. You could get to sit; it was like it was your own private little area. They’re the sorts of places that I like; a lovely seat, and you sit and *be* there for a while. That is something that I find quite distressing when people move too quickly past enclosures. They don’t have the chance, often, to see the animals. But if you can sit somewhere, and just be quiet there, you can see a lot more.

Shelley articulates an understanding of the need for change and that the zoo still has these tucked away, quiet places. She also appreciates the zoo’s need for large, ‘iconic’ species that provide the ‘wow’ factor.

I understand the dilemma between having large animals and encouraging families with small children who need to see large animals and therefore the need to get them in the zoo with the conservation aspects. It’s a constant dilemma.

Image 49: Adelaide Zoo map circa 1981 (*The Adelaide Zoological Gardens: Adelaide Zoo 1981*)



Sitting in the central *Fig Tree café*, other long-serving volunteers reminisce together about this aviary structure and acknowledge why it was lost.

There used to be a big aviary, with macaws and an agouti. That was the most wonderful aviary. It actually had a pump with flowing water down the middle of it. It was big, and green, and beautiful.

Another guide confirms this appreciation, “yes, it was lovely, and it went for the Pandas.” These keeper and volunteer narratives signify different perspectives on progress compared to the official mediations. Beverley, as a Team Leader for example, didn’t think losing land and animals from a small zoo was beneficial, especially as this double loss coincided with less money for her round and resulted in more people employed in administrative work. Her comment of “a zoo always has to progress” equates the loss of land and animals as regress, or a descent in rank. The volunteers articulated the understanding that progress meant change through loss of species and structures, but still lamented the loss and were ambivalent about this outcome as progress. Neither party questioned holding life forms captive. These people chose to work at the zoo, and what was of import to them was the loss of places to hold captives and the diminishing number of species being held.

Upgrading the perimeter fence, entranceway, and internal structures, were material realities that altered the lives of humans and earth Others. Management narrated these changes as progress, but some keepers and volunteers questioned this perspective. To lose so many captives and gain just two Giant Pandas was deemed, in hindsight, not so progressive. So too, the ballooning debt, entangled as it was in the Global Financial Crisis, revealed weaknesses in management and resulted in a complete turnover of CEO, Board President and senior administrative staff within my volunteer tenure. This is a clear example where “making meanings involves the interrelationship of complex discursive and material practices” (Barad 1998, p. 98). Discourse in Barad’s understanding, “is not what is said: it is that which constrains and enables what can be said. Discursive practices define what counts as meaningful statements” (2007, p. 146).

The discourse by management attempted to *explain* the debt and its ramifications, which included a restructuring of zoo debt and an acknowledgment of problematic relations

between board, management and staff. However, the experiences of people who attend the zoo to keep or volunteer included other materials, the materials excluded by the official narratives. These materials / matters included the Giant Panda acquisition, the loss of captives to Monarto and the changes to the zoo's older exhibits. The limitations of the representations, that is, what was officially being said, or being offered to explain the debt and the loss of land, animals, exhibits and staff, didn't include all the matter that mattered.

Different material intra-actions produce different materializations of the world, and hence there are specific stakes in how responsiveness is enacted. In an important sense, it matters to the world how the world comes to matter. (Barad 2007, p. 380)

Life-experienced matters are not just 'what is said,' they are part of the discourse. The soon to quit CEO was still *in situ* during my first year of fieldwork and a fellow volunteer referred to him as, "like a slowly leaking, helium, balloon." The CEO's material substance and possibilities appeared to diminish to this volunteer as part of the discourse of the zoo. In these ways, performing 'zoo' also concerned the "material constraints and exclusions, the material dimensions of agency, and the material dimensions of regulatory practices" (Barad 2007, p. 192).

In posthumanist theorising, performativity is an engagement with the practices and processes of becoming, and in this instance, becoming zoo.

A *performative* understanding of discursive practices challenges the representationalist belief in the power of words to represent preexisting things. Unlike representationalism, which positions us above or outside the world we allegedly merely reflect on, a performative account insists on understanding thinking, observing, and theorizing as practices of engagement with, and as part of, the world in which we have our being. (Barad 2007, p. 133, Original emphasis).

When volunteers were asked not to comment to anyone about the debt, the departing senior figures, and / or the media coverage etc. many felt they were being constrained in what could and could not be referred to. Likewise, volunteers felt that they were shaped to perform zoo in particular ways. In complying with these directives (it was inferred)

volunteers were not giving oxygen / energy to the erupting negative media. We were given pamphlets (fact sheets) about the positive aspects of holding captive Giant Pandas and were requested to speak to these facts if asked anything about the zoo's situation. However, the official representations of management sometimes lacked resonance amongst the keepers and volunteers recorded here, including myself during volunteer work. "What matters is marked off from that which is excluded from mattering but not once and for all" (Barad 2007, p. 181).

Shelley understood the "constant dilemma" where large iconic life forms and structures replaced beautiful aviaries, of how spectacle challenged amenable, and also how the remarkable succeeded the unmarked. Keeper references to "heartbreak" at a "lost ungulate round" are another example of exclusions still mattering and constituting the *now* through absence. However, these matter to particular people in particular ways rather than being part of the official zoo discourse.

The material engagements with enclosures, seating, privacy, pleasure, plus the quantity and diversity of captives, signified as 'dilemmas' and 'heartbreak' to these humans. They were part of zoo-performance, and no doubt to the captives duly transferred up the South Eastern freeway to Monarto Zoo, these 'matters' mattered too.<sup>57</sup> Representations by management did not align with the engaged observations, thoughts, and theories, articulated by some staff and volunteers. However, the trope of human exceptionalism, of being up to the task and the possibility of progressing towards a better zoo, endured.

### **Exploring representation and the absences it utilises**

At the zoo, management practices perform separatist manipulations through representations that elide various resonances and dissonances, thereby making entanglements that matter, *invisible*. This allows the humanist category 'progress' to have many varied essences without changing the category being invoked, all that is required is a different representation.

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<sup>57</sup> "Since 1982 the Society has operated a 1,500-hectare, open range zoo located 70 kilometres east of Adelaide near Murray Bridge. Open to the public everyday, approximately 400 hectares are devoted to the breeding and display of rare animals, particularly herds of large, grazing animals from Africa and Asia, with the balance of the area being dedicated to the conservation of fauna and flora of South Australia. The Park is a protected nature sanctuary with diverse and fascinating wildlife and vegetation" (ZoosSA 2011b slide 2). Captives live in 'open 'range' exhibits at Monarto, and therefore the affordances of their lives would have expanded to include larger spaces. A better 'metric' for the well-being of captives?"

(R)epresentationalism is the belief in the ontological distinction between representations and that which they purport to represent; in particular, that which is represented is held to be independent of all practices of representing. That is, there is assumed to be two distinct and independent kinds of entities — representations and entities to be represented. (Barad 2007, p. 46)<sup>58</sup>

Numerous representations of human control and manipulations of ‘matter’ sit side by side in the official announcements (from the Society’s CEO and the Board’s President) of this Giant Panda / front entrance / boundary fence build. These past representations, the narratives of management, demonstrate how the lives of Fu Ni and Wang Wang were manipulated to fulfil different logics about their captive lives and subsequent transport to Australia.

For example, the Society’s CEO wrote about a Chinese earthquake in the province where the two soon-to-be Adelaide Giant Pandas were born, reared, and were, at that time, living.

Our new colleagues and friends at the Wolong Reserve are mourning the loss of five staff members killed in the earthquake. (West 2008, p. 4)

He goes onto say that it is just these occurrences that highlight the need for *ex situ* breeding to ensure endangered species’ survival.

The sudden and terrible impact of such a natural disaster underlines the importance of having international breeding programs as insurance policies for endangered species hemmed into remnant areas of habitat. (West 2008, p. 4)

On the next page the President of the Royal Zoological Society of South Australia argues that zoos have progressed from exhibiting captives as “‘trophies’ in cages” (Caddick 2008, p.5). This progress is achieved by focusing on, “providing an environment for animals that closely emulates their habitats in the wild, allowing for natural animal behaviours, with breeding being the ultimate outcome” (Caddick 2008, p. 5).

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<sup>58</sup> Bateson (1972) refers to this as Korzybski’s (1941) renowned assertion, “the map is not the territory” (pp.180 and 455).





Image 50: The air-conditioned indoor day and night-quarters sit in between the two outdoor exhibits.

Absent from this narrative are the wide ranging areas deemed *in situ* Giant Panda habitat, for example, the altitude of these ‘remnant’ areas — altitude in Wolong, Sichuan China is 567m while in Adelaide SA 30m — the solitary lives of the species, and the

nursery-reproduced captive born offspring supplied to *ex situ* zoos. Wang Wang and Fu Ni were not “hemmed in remnant areas of habitat” as they were captive born and living in Wolong sanctuary when the earthquake occurred. The definitive goal for these captives and / or their descendants — although currently living in multi-altitude zoos throughout the world, without nursery-like conditions — is re-establishment *in situ*. This is argued by Board President, who states that, the “next step... is to return species to the wild, confident that they will be able to live a safe and natural life” (Caddick 2008, p. 5).

The representation of removal *from* habitat is required now because being “hemmed into remnant areas of habitat” (West 2008, p.4) has resulted in endangerment (either human encroachment ‘hemmed-in,’ or geologic disaster, ‘earthquake’), whilst the ultimate goal is to “return ...to the wild” (Caddick 2008, p.5). This particular narrative reveals how progress is represented through the captives being manipulated in alternate ways and alternate representations, to ensure coherence that supports western humanism’s progressive time.

For the zoo's Giant Pandas:

...representationalism is a practice of bracketing out the significances of practices; that is, representationalism marks a failure to take account of the practices through which representations are produced. (Barad 2007, p. 53)

The reality of all matter having agency, that is, matters “agential realism” (Barad 2007, p. 152) include the phenomena under consideration (agentially cut <sup>59</sup> here as *Panda*). The pandas are separated out into various essentialisms that don't intermesh with their entire connective possibilities / probabilities. For example, Giant Pandas are presented as bred in captivity (ZoosSA 2013c, p. 1) to show how well humans are able to control this, yet destined for return to *in situ* as the human goal being attempted. Giant Pandas are transported for political purposes and as a resource / income stream for receiving institutions / nations yet they are also ambassadors for their wild counterparts and represent human attempts to preserve their species (ZoosSA 2013g). A panda is an ambassador in the sense that it, “personifies its species....[and offers] ... contributions to biodiversity and genetic variation” (Benbow 2004, p. 394). Giant Pandas fulfil these same / different representations — same as in personifying panda, different as in genetically diverse pandas.

In captivity, they are manipulated physically and reproductively, held in reduced size simulations of home-habitat at various altitudes (dependent upon which zoo they are held in), but are still deemed as being prepped for return to *in situ* life. This return to ‘natural life’ *in situ* is the goal of the interventions but until that goal is achieved, holding Giant Pandas in Australia (*ex situ*) is represented as safer. This is held as progress even though no ‘time’ is given as a metric for success. Breeding is the mechanism that will allow introductions-to-the-wild and yet, as of writing (June 2019), Fu Ni and Wang Wang have not bred. If they do breed the offspring will be returned to China (ZoosSA, p. 3), and presumably to Wolong. After return to China, introduction to the wild is with the Chinese authorities. These exclusions within the narrative, absent from the 2008 humanist

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<sup>59</sup> “For Bohr, apparatuses are particular physical arrangements that give meaning to certain concepts to the exclusion of others; they are the local physical conditions that enable and constrain knowledge practices such as conceptualizing and measure; they are productive of (and part of) the phenomena produced; they enact a local cut that produces “objects” of particular knowledge practices within the particular phenomena produced” (Barad 2007, p. 147).

progress articles by the CEO and President quoted above, obfuscate the emergent lives of the captives being manipulated. Further, any number of other interventions, human or otherwise, could occur. It reveals the underlying argument of this chapter, that the entanglements where phenomena dynamically emerge including Giant Pandas, keepers, the public, exhibits, zoo management, China, Wolong, earthquakes and Chinese authorities, are *manipulated* through representationalism. I argue representations manipulate because, in the past and presently, different facets of panda life-emergences are given prime focus while other panda life-emergences are absented. This is a practice of presence and absence within the representations produced by the zoo.

Also, these representations are produced and consumed within multifarious, alternate mediums, at different times and places. Each separate representation makes coherent a progressive ‘humans in control’ narrative. Reading them diffractively through each other, one experiences the foundational belief in humanist ‘progressive time’ idealism, and the essentialism, of Cartesian duality. The keepers and volunteers above responded to the loss of ungulates and exhibits with remorse as through their entanglements they experienced the ranking and reworking of zoo captives. My interlocutors experienced, “how nonhuman animals are being appropriated for human desires ...[and] how our desires and our beings are co-constitutively reconfigured” (Barad 2007, p. 384).

For ungulates, agouti, beautiful waterfalls and refurbishments, keepers and volunteers, entanglements with these Other matters, mattered too. The separation also requires stasis rather than change within the categories being manipulated for representations to work. That is, numerous representations allow movement where categorisation requires stillness. Conservation, as a static category, is a good example of where the zoo manipulates meanings via representationalism.

### **Conservation as a representation**

Conservation is the static category manipulated by representations in the Giant Panda discussion above. By allowing multiple representations to depict different meanings, without changing the ‘essentialism’ of conservation, I argue that conservation, as a category, is held still. Further, these different representations are incoherent when read en-masse. For example, conservation of Giant Pandas can mean that one day they are to

be returned to the wild / home-habitat / *in situ*, which is the desired outcome, but also the place of danger hence requiring international rescue in the first place. Another incoherent representation is that conserving Giant Pandas means inhabiting international zoos / captivity / *ex situ* where they are life forms that will breed and ambassador for wild counterparts, but they cannot adapt to local conditions and affordances as they must remain essentially Giant Panda (as discussed in chapter four). Further, they will be reproductively manipulated using artificial insemination (ZoosSA, p. 1). In Wolong this has produced nursery conditions where multiple young are bred and are raised by humans, so as to one day be returned to the wild. This however means the young are raised *without* Giant Panda-mothering *in situ* guidance, therefore compromising their species-specific behaviour of solitary living, and for female Giant Panda the possibility of learning mothering skills at all. But in every instance, the category ‘conservation’ is being implemented. As one zoo vet nurse conveyed her China panda reproduction learning experience, “they basically manufacture baby Giant Pandas over there” (ZoosSA 2013i). As Other life forms, pandas are thought of as manipulable:

Sampled, regulated, harvested, managed, animals ...targeted through a range of technologies, both broadly and finely calibrated, both *in situ* and *ex situ*. (Chrulew 2011, p. 146)

Chrulew examines the interventions of zoos into captives’ lives and questions the veracity of claims for conservation based on the knowledge zoos have of reproductive interventions (artificial insemination, genetics). Biopolitics looms large here as the zoos’ earth Others endure the brunt of our species’ belief in human exceptionalism. Chrulew calls our interventions “double death,” adopting the neologism from Rose (2004). In double death, western civilisation reduces earth Other habitat, diversity and populations, and then detains species to redress the endangered category (Chrulew 2011, p. 149).

The intense focus of zoological programmes on the propagation of life and the survival of future generations disguises the extent to which their methods of intervention — artificially and inadequately focused on the genetic, species body — are themselves attacks on the ability of life to reproduce itself as resilient and self-sustaining. (Chrulew 2011, p. 152)

What is real, or becomes real, for the Giant Pandas and all the other things / matters is bound up with these representations but also with many other matters, unforeseen, unknown and ongoing. “We are material networks of relations, fluctuant becoming in symbiotic interaction with the ‘others,’ the environment, our surroundings; we are constant potentials” (Ferrando 2014, p. 171).

For the zoo’s Giant Pandas, the possible outcome of ‘no offspring / breeding’ was absented or excluded in 2008, yet breeding is the prime achievement of the representation of panda ‘conservation.’ Even though Giant Panda breeding is a difficult exercise, this 2008 possibility (and 2019 non-event) makes the representation or category ‘conservation’ a debateable intervention. Underplaying this possibility is one misbegotten representation; another would exist if the pair *had* bred. The point Chrulew makes pertains here, for what resiliencies to *in situ* life would Fu Ni and Wang Wang’s offspring possess?

At time of writing, they potentially may / may not reproduce within their exhibition spacetime at the zoo. This contradictory outcome emerges where representations are infinitely manipulable, but the things represented, here Giant Pandas, are subject to human interventions that cannot control (in the sense of predicting the outcomes definitively) what emerges. Peace (2005), in an article on language declarations around ecotourism, and the myths and alternate representations utilised to sustain it, highlights the need for anthropology to explore ideologies in such experiences where contexts are “contradiction-replete” (2005, p. 332).

Peace (2005) observes the information-rich eco narratives supplied — orally or written — to island resort visitors in Queensland, Australia, and it is these *eco* claims he is examining. From the utopian description of the surrounding island, to the energies channelled into its tourist build and maintenance, and in the judgements made between original inhabitants and their eco attributes compared to current western standards, Peace assembles the eco-strategies being exercised. He notes that the, “notion of ‘making nature better than it was’ crops up frequently” (Peace 2005, p. 326).

The human interventions are all positioned as progress, by resort managers, including the re-structure of the island during the original build, altering swamps to lakes, using diesel then switching to mainland supplied cable power, and the local flora and fauna's propensity to move about and thus require, "tactical improvements" (Peace 2005, p. 327). So, too, he notes the education-as-conservation programmes that slice up information into digestible parts for visitors juxtaposed with the claims that the holism of the original indigenous inhabitants best serves the sustainability required in an enterprise like theirs. Peace (2005) argues these once-upon-a time inhabitants are glossed as best eco-practitioners who have long-since departed; which neatly makes their non-presence *now* explained, yet usable.

Peace (2005) summarises the ecotourism myth-making he encountered, as firstly, moral messages centred around indigene versus western processes / practices that result in little practical application; secondly, that capitalist extraction is able to retain eco-integrity; and lastly, the metrics being utilised around ecotourism — all the matters including people, their transport, dwellings, food, water, plus the disposal of all these requirements *and* the listed energies the resort referred to as eco — are treated as equivalences. That is, tourism is sustainable on this island through the energy uses on site being equal, as *measured* by operators. He argues these metrics require a "narrow understanding of what the resort is responsible for" (Peace 2005, p. 331). This delineates what is under resort care and what is not, and as Barad suggests, "representationalism is a practice of bracketing out the significances of practices" (2007, p. 53).

I would argue the zoo's western humanist practices narrowly define, that is measure in Barad's terminology, what zooing is responsible for. This is where the representations allow different meanings, at different scales of space and time and matter, to explain conservation rather than including all the 'matters that matter' in working out "the significances of practices" (Barad 2007, p. 53).

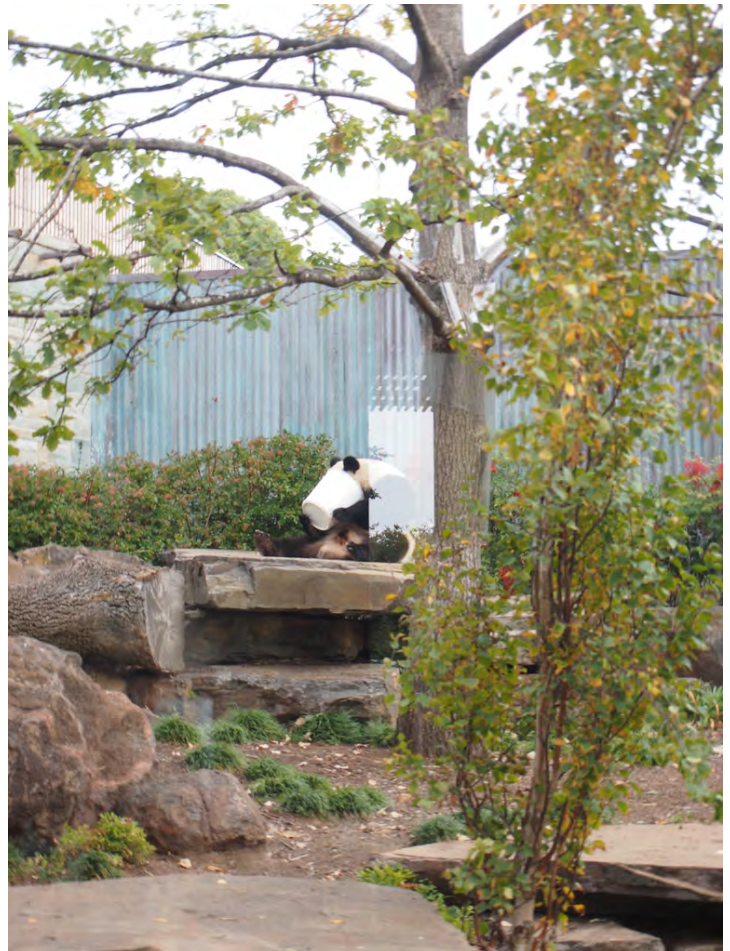
There is more to nature than 'nature-as-the-object-of human-knowledge.' The latter constitutes a re-veiling (which provokes the seeming need for a revealing) of nature. (Barad 2007, p. 378)

*Misrepresenting* meaning by continuously manipulating earth Others into contradictions “veils” Other matters. For the zoo’s Giant Pandas, agency, knowledge and emergence are veiled, or narrowly defined, notwithstanding that *in situ* / *ex situ* they co-evolve with and within their surrounds:

...the claim to being ecologically sustainable can only be manufactured and managed by concentrating on a select number of symbolically appealing practices within an arbitrarily bounded physical locality. The fetishisation of that boundary serves to obscure many of the more important processes. (Peace 2005, p. 332)

At the zoo, this occurs where it is declared that *this* is conservation, and *that* is not; or *this* is our conservation-responsibility and *that* is not our conservation-responsibility.

Image 51: Eating from a bucket (note the reflection from the glass).



For Fu Ni and Wang Wang, their worlding emerges within enclosures at the zoo, but their future, their becoming, is wrapped up in many matters of becoming including the representations of humans. As Peace argues for ecotourism, Giant Pandas at the zoo come to matter through “highly specific cultural” representations “to large numbers of people” (2005, p. 332).

The entanglements we are a part of reconfigure our beings, our psyches, our imaginations, our institutions, our societies; “we” are an inextricable part of what gets reworked. (Barad 2007, p. 383)

This relational, or posthuman experiential perspective, emphasises interventionist manipulations the zoo uses to manage the representations of conservation utilised in day-to-day zoo practices. By understanding the metrics being used, we perceive how “measurement practices are an ineliminable part of the results obtained” (Barad 2007, p. 121).

### **Contradictions**

Keepers articulate angst and mistrust at the numerous representations the zoo management generate, and the humanist regulations imposed by governance bodies, whilst trying to work out what is best, in terms of long-time wellbeing, for their captives. In other words, keepers attempt a relational, inclusive of all-the-matters-they-can-think-of perspective and practice, to try to ameliorate the commercial, market world, administrative ethos. For example, although keepers’ articulate preferences for the animals they husband, and how those animals are displayed, they comprehend the benefits of a wider remit and gaining experience rather than restrictive focus, albeit, with limits.

For example, one older, long-term, keeper Reg, stated, “I like any job, except with [names species]. I don’t know. They are not for me.” During his early career he was initially upset at being removed from his particular speciality to dealing with numerous animals. Retrospection altered this perspective.

Then I got put in the ‘holding block’ [off exhibit backstage] where all sorts of animals go. I thought then, *what am I doing, I am a [names particular species] Keeper*. But now, in hindsight, it was the best thing that could have happened: Lots of experience.

Reg, who acknowledged the need to experience more than just his beloved species also enjoys enclosures with a mix of species, “I believe in displaying *habitat*. Animals as part of the environment.” Reg has never been interested in a career path but having worked in



various zoos, here and overseas, he has created a second income, which allows more flexibility in working hours taken up at the zoo. He knows keepers who applied for jobs at this zoo because of the offers to do conservation; “The jobs here are cleaning out the enclosures and feeding the animals. All hands-on stuff, all the time, right here.” Reg said that some of the staff hired — thinking they would be ‘conserving’ — are disappointed that doing conservation is limited due to budget cuts.

One zoo definition of conservation appeared in the 2012 Annual Report as, “conservation is the securing of long term populations of species in natural ecosystems and habitats wherever possible” (ZoosSA 2012a, p. 19). Conservation, as a representation of the zoo to the wider public, carries different meanings to management and keeping staff.

To elaborate, management use the ideal of conservation to shape the zoo to meet western perceptions of what a zoo *is*. This representation performs zoo through eliding exactly what the material practices of conserving include and exclude. In Reg’s opinion, new keepers’ disappointment at not doing conserving is one such exclusion, as was the management’s decisions when the front entrance and panda choices emerged. Reg stated,

I became disgruntled at the direction the zoo was taking. I am a people person. I could see that management were about marketing and big ‘game’ plans. Like I said, I like to think I am a people person. To treat the people who are working for you well, you get better results and it is a good place to be. I was not comfortable with the direction. I struggled with all that. There is a young keeper here, he came from somewhere else, applied for the job which stated there were *opportunities for conservation and fieldwork*. But these were never activated. He is not too happy at the moment, leaving the other place and all, [doing] conservation and fieldwork in the Bush.<sup>60</sup>

A fellow volunteer offered a commentary on Reg’s interview.

Reg just dislikes how things were prioritised and keepers became seconded to the plans. The money spent in the places it was spent and the way people on the ground were not considered in these plans. When the financial debt problems became

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<sup>60</sup> ‘The Bush’ is colloquial Australian terminology for the vast, inland, expanse of the continent also referred to as *the outback*.

apparent, management saw that by amalgamating several rounds they could get rid of two supervisors in each area. That means four people are ‘missing’ from this amalgamated group of three areas. No one ever asks a keeper about the architecture of new enclosures, or the priority of actions to be taken, with regards to the zoo’s direction.

Reg offered a brief, but intense summary of his feelings about his life-work: “This is what I do. Even though I have a backup. *This* is what I do.”

Another keeper, Mikey, loved the job and worked at it across the globe in English speaking places. He began to chat about his preferences and dislikes of the job and how Australian regulations affected the possibility of obtaining certain species. He casually picked up a magazine lying on the table. It was dedicated to advertising certain species for sale and Mikey pointed out one advert. He told me the zoo now proudly husbands two of these advertisers’ species.

The person who brought [them] in [to Australia] has been busted, so *we* have them now. Here they are again, advertising, after they were busted! Advertisers are shonky. It is a stupid system. It guarantees that people will smuggle. They closed it all off because of disease, but people just kept on doing it. Like the drug trade, it is illegal, so there are no taxes, no quarantine.

Smuggling Other life forms into Australia is a federally policed boundary (a *Biosecurity Import* problem) to prevent the spread of disease. However, being ‘illegal’ has advantages in market-world ethos.

In advanced capitalism, animals of all categories and species have been turned into tradable disposable bodies, inscribed in a global market of post-anthropocentric exploitation.... traffic in animals constitutes the third largest illegal trade in the world today, after drugs and arms but ahead of women. (Braidotti 2013, p. 70)

Mikey argues illegality trumps responsibility for preventing disease, as the smugglers openly advertise smuggled species in specialist magazines. Mikey also noted the similarity to the “War on Drugs” which he deemed a failed enterprise. In this instance, not allowing legal imports of Other life forms creates opportunities that are only enforced

in the breach *when* they are discovered. Barad refers to these patterns as the, “fundamental constituents that make up the world... diffraction patterns — patterns of difference that make a difference” (2007, p. 72).<sup>61</sup> Mikey exposes diffraction patterning here by noting the similarities of lucrative transgressions, where indigenous life forms, or kilos of psychoactive substances, are smuggled into (and out of, in the case of indigenous species) Australia for profit. “Crucially, diffraction attends to the relational nature of difference; it does not figure difference as either a matter of essence or as inconsequential” (Barad 2007, p. 72).

This ‘stupid system’ makes it difficult for Australian zoos to legally import many species and rankles with more than one keeper, for whom these outcomes are far from inconsequential. As they are for the captive life forms entangled. This categorical thinking, where ‘the budget’ pervades conservation, and where disease restricting governance measures result in lucrative illegal animal trading, are examples of the contradictions of keeping that diffractively entangle them, the captives, and the zoo within a wide remit of matters: concepts that include the mattering of market world and day to day of zoo life.

### **Resigned regret**

As discussed above, local zoos are entangled with national and international zoological governance bodies. These relationships work within the western remit of human progress / exceptional understandings and thus create more contradictions for people at the coalface of keeping as well as in regional possibilities for zoos. Often outcomes restrict regional species diversity, and the possibility of local captives from ever breeding. These are outcomes not mediated widely but are spoken about within the zoo. At a monthly volunteer meeting (ZoosSA 2013e) a curator confirmed the difficulties discussed by my interlocutors around species importation.

The curator spoke about quarantine regulations and bureaucracy around importing captives, and the resultant contradictory outcomes.

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<sup>61</sup> Barad is paraphrasing Haraway (1992) here using “diffraction,” and echoing Bateson (1972) in “patterns that make a difference.”

The pygmy hippo [for example], we have to get government [support] to import one of those. There are priority species and we cannot import any [of those] ... there are so many issues. That is why you go to any Australian zoo and see the same species. You have to have 'twenty spaces' within your region for these animals. If lots of people want it [then you might get the green light]. Then we know New Zealand can import, but we can't get them [the priority list species] into Australia because of the Quarantine status [here]. (ZoosSA 2013e)

This movement to mono-collecting is a phenomenon within Australian zoos and some keepers expressed regret at lost opportunities to experience husbanding assorted earth Others in a zoo / region of diminishing species diversity. To be able to apply for species, Australian Zoos have to have accommodation at twenty different places across the country to begin the process. As the curator told the volunteers at the monthly meeting, "there is even problems getting Panda semen into Australia. So many issues [around animals into Australia]" (ZoosSA 2013e). The curator also acknowledged that changes in regional captive choices bring local problems. A volunteer question about a particular South American species' status in Australian zoos prompted this reply about the species particular 'popularity':

They were [popular] when South America was the focus. *Then* the region went South East Asian. Now there is not a call for South American. You can never get all the zoos in a region to agree. Look at Gorillas [as an example of the regions quarrels around agreeing to obtain them]. (ZoosSA 2013e)

These limitations affect keepers too, as they are well aware of the resulting restrictions around keeping experiences and, therefore, their skill set. However, one Head Keeper, who had been at this zoo for quite a few years, articulated another view.

When I started here it was 'European' — lots of the keepers were from Europe, and how Europe did things, we would do them. The zoo was a 'menagerie:' lots of animals, lots of cages. Gradually that has been changed. I worked through all those changes. South East Asian Rainforest, the Panda Forest, 'behind-the-scenes' tours, and the *Wow* factor in animals came in, where we used to have megafauna — elephants and rhinos. I enjoyed the megafauna, now we have breeding programmes. We used to breed up what we had and then ask *what are we going to do with 17 lion*

*cubs?* Now we are part of a breeding programme and the species are ‘franchised’ so that here in Australia the zoos have the same species, for breeding and conservation purposes. We have population management.

This is the management ethos writ large, the adaption of zoos to the requirements of the larger cultural requirements. Rather than speaking to the restrictions, this keeper adapts to what *is* and gets on with it. However, there are affects for the work-a-day job of keeping and this is what many of my interlocutors spoke to. The restrictions of quarantine regulations together with required amounts of regional spaces for off-site solitary species, and consensus issues between zoos, all limit species diversity in Australian zoos: they entangle to create regional zoo monocultures. Moreover, the captives being manipulated also *experience* these issues.

For example, at the same volunteer meeting the curator acknowledged that biologic, geographical as well as political issues entangle to reduce diversity prospects. The curator was in a ‘question and answer section’ of his presentation and responded to a question about Tapirs. The zoo husbands both Brazilian and Malay Tapirs and he spoke about the problems with keeping these captives. Tapirs live mostly solitary lives and there is some speculation about conspecific and gender groupings in captivity (*Tapir (Tapiridae) Care Manual* 2013, p. 15).



Image 52: Malay Tapir underneath another Moreton Bay Fig Tree.

Adelaide zoo, as a small city space, have only one ‘front of house’ public exhibit, attached to a small backstage, holding-cum-night-quarters for each of the Brazilian and Malay tapir mother-daughter pairs, respectively (at different locations in the zoo). During fieldwork the blindness of the Malay pair was often spoken about to visitors during guide tours. During behind-the-scenes tours the Brazilians were fed and patted (a very pleasurable, albeit, dusty affair).

The problem with separately keeping an adult male and maturing offspring complicates this species’ captivity, as the curator informed the volunteer meeting.

The Malay Tapirs are blind; other zoos saw this first in the Brazilian. There was a push to import Malaysians ...one birth, then castrate the male. Melbourne zoo brought a male Brazilian then he was shunted out the back. We were one of the big breeders. (ZoosSA 2013e)

The curator suggested that this zoo had been successful at breeding tapirs but there had been interstate problems with keeping males and subsequent numerous offspring, hence castration of males. Castration, as an experience, seems an unpleasant outcome for the individual and species, especially as tapirs have IUCN rankings from vulnerable to endangered (dependent upon sub-species) (*Tapir (Tapiridae) Care Manual* 2013, p. 5).

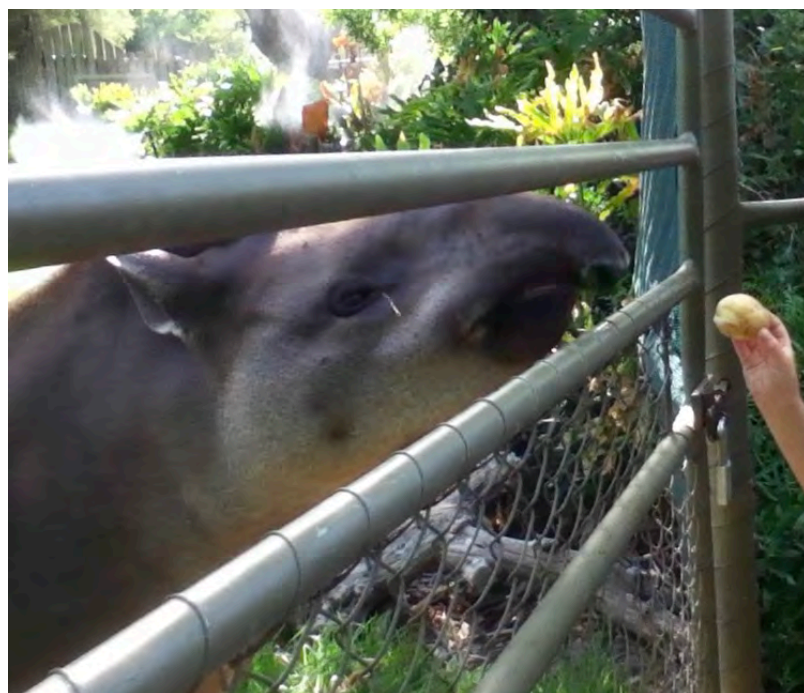


Image 53: Hand-feeding Brazilian Tapirs during a behind-the-scenes tour.

Control, in this instance, requires numerous matters to be aligned; space in the zoo to separate the matter of tapirs; spaces in other regional zoos to receive offspring (in time); the matter of agreement on the particular sub-species chosen (Brazilian or Malayan matter in this instance); and finally, over time, the movement around the region of genetics (more matter) to keep the *ex situ* population viably reproductive, or at least to follow studbook keeper rulings.

These complications of *in situ* and *ex situ* becomings contradict the narrated, and represented to the public, attempts to conserve these species. The captives' experiences are limited and intimately controlled — held static — and our region's zoos experience the stasis of monocultural collections. In conserving tapirs more diffraction patterns within a pattern, emerge. One of which, for me, was that my interlocutors expressed resigned regret at these multitudinous obstacles to keeping. Importing exotic species to conserve also becomes problematic when local species are also diminishing, and creates discussion around the energy being expended.

### **Local versus exotic conservation and a return of The Spectacle**

The conundrum of *where* to expend energy raises many questions about conservation. As a mode of 'saving animals from extinction' (part of the Adelaide Zoo's mission statement) the representations of zoo conservation do not always fit the ideal being promoted.<sup>62</sup> Furthermore, many of the new innovations are just upgrades of old-time practices / performances. One recently employed keeper, Doreen, compared conservation efforts at Adelaide Zoo with interstate zoos at which she had worked.

Adelaide Zoo could do effective work right on their doorstep and launch a public awareness campaign. All of the talk is about revegetation at Monarto. I find it interesting that other habitats are under threat and the zoo is not interested. If you stop calling it 'The Zoo' and call it the Royal Zoological Society of South Australia, it should be interested in things right on its doorstep. A lot of local animals are more endangered than the [Giant] Panda.

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<sup>62</sup> On the rounds referred to in this chapter there were local 'indigenous' species conservation efforts. Other rounds had local conservation efforts, too. I do not wish to diminish these efforts and I do acknowledge that they took place, as do the interviewees, who, however, still articulated these opinions.

For this new keeper, conservancy of local species could / should take priority over exotic species with the added extra of engaging the staff, which she determined, were upset about management's past mistakes and unfocused on future possibilities. Cronon (1995) speaks to the problems of conservation as outcomes of western dualistic thinking that idealises wilderness and absents local, at home, ecosystems. "Idealizing a distant wilderness too often means not idealizing the environment in which we actually live, the landscape that for better or worse we call home" (Cronon 1995, p. 85). His argument is that without closer-to-home eco thinking, which works on people's immediate surrounds, we may become, "dismissive or even contemptuous of such humble places and experiences" (Cronon 1995, p. 86).

This also connects to the mono-cultural lack of diversity at the zoo where the large spectacular species — "big, ...pretty and ...easy to see" (Osborne 2013) — are ranked higher than the local indigenous 'endangered' species. As a small zoo, Adelaide would do best to think and act locally according to Doreen, who stated;

In terms of conservancy, [the Society] could probably be more effective in terms of local stuff than exotic: generally, the staff could be more involved and have better morale.

Doreen spoke of conserving local species with regret at so little effort being made, and annoyance at the claims and outcomes of keeping pandas. Barad argues:

...the constitutive nature of practices... that which is excluded in the enactment of knowledge-discourse-power practices plays a *constitutive* role in the production of phenomena — exclusions matter both to bodies that come to matter and those excluded from mattering. (Barad 2007, p. 57, Original emphasis)

The representations by management did not resonate with keepers, who are well positioned to judge the conservation efforts being attempted. Local exposed species — of "humble places and experiences" — are excluded, and exotic imports provide copious challenges, yet the import of exotics still receives major funding albeit focused on 'iconic' species. As a new keeper in Beverley's round, Doreen was well aware of her outside status in respect to the zoo's recent panda-acquisition past, but she articulated



enjoyment working on this round with her fellow keepers and captives that included both locals and exotics. As well-functioning keepers that coped with the vicissitudes of not being considered a spectacular space — compared with other rounds — Beverley’s round coped with their perception of being ‘excluded from mattering.’ She told me:

We can move things around and change the exhibits. It is always evolving, more useable. [We can] make changes earlier, re-do it. There is more work in [for example] ...carnivores.

She articulated that due to the material flexibilities of the species under their care, and thus the easier manipulation of exhibits, their round lacked *wow* factors, or what I am referring to as spectacle. Spectacle, as a zoo performance, continuously returns as another pattern within a pattern, where primates riding bicycles and elephant rides morph into ambassador species and reproductive manipulations with ‘wow’ factor. I have written about the attempts at genetic reproductive manipulation of the zoos’ pandas in chapter four, and their state of art exhibit. As team leader, Beverley understood her round, and therefore her team’s working conditions were ‘different’ compared to other rounds; her round was less spectacular. Spectacle, as science, has returned through reproductive technologies and state of the art exhibits in zoos (Szczygielska 2013, p. 105).

Szczygielska (2013) is troubled by strictly humanist readings of zoological gardens and subsequently questions what zoos accomplish. The list includes seed bank conserving and enter / info-tainment. She uses the concept of “transbiological”<sup>63</sup> as it queers the scientific biologic of boundaries / meanings around human and other life forms. Under examination are attempts to breed exotic and indigenous species through gene manipulation where, “designed kinship structures and controlled genealogies ... seem to be the main components of the zoo’s transbiological enterprise” (Szczygielska 2013, p. 107).

This supports Doreen’s lamentations about ‘local stuff’ rather than the Society’s focus on ‘exotics.’ Giant Pandas, natural habitats and manipulating genealogies are just more

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<sup>63</sup> “The notion of transbiology has been developed by Donna Haraway in her book *Modest\_Witness*, and later by Sarah Franklin. It is an approach that aims at re-engineering the boundaries of the self, nature and the human by focusing on hybrid entities and shape-shifting categories emerging from the new technological advancements open to biosciences” (Szczygielska 2013, p. 101).

‘spectacle’ to entice the public through the gate, while local indigenous species under threat from local humanist, progressive, imperatives currently coupled to capital extractivism (forestry / logging, agri-commerce / pesticides, and exotic predators / introduced life forms as natural remedies) are left to their own adaptive devices.

Keeping has different meanings for people who understand the absences / exclusions within the official narratives being used to represent the zoo to the wider culture. Understanding that experience *counts* when entangled with other life forms and comprehending the limits to being able to conserve life forms as a keeper when the job is ‘hands on, full time,’ makes keepers’ progressive impulses diverge from those of management. As does understanding the limitations of quarantine processes and practices and how policing illegal trading — being of limited reach with contradictory outcomes — is a questionable activity. So too, the non-adoption of a wider naming practice and process (Royal Zoological Society of South Australia, rather than Adelaide Zoo) to attempt wider conservation practices being understood and delivered for local species, disrupts normative management representations. The once-upon-a-time ‘spectacle,’ as a recurring zoo theme, diffracts techne in transbiologic and habitat manipulations, through the lived experiences of keepers attempting to do the ‘best’ for life forms ‘under’ their care. Beverly and Doreen realised that their round was not technologically spectacular and therefore did not attract the energy given to other rounds. Spectacular immersive-builds and state of art science for all the energy — or captial, as in money *or* human endeavour, physically or mentally — expended, are narrow ideals which may support the zoo surviving, but at what expense?

Species Survival Programs are part of zoo propaganda that is actually all about saving the institution from extinction. The new immersion exhibitions promise zoo-goers not only a better, more realistic imitation of nature and an exciting encounter with exotic animals, but also pad the conscience of zoo spectacle consumers. (Szczygielska 2013, p. 105)

Keepers articulated that species locally endangered could be better served, and maybe saved, if zoo energy was more home, and less spectacle, focused.

### **Relationship shaping**

The relationships between keepers, volunteers, captives and visitors interweave and shape what is happening, and what is *thought* about what is happening. In the Children’s Zoo, unlike most keepers I spoke to, one keeper, Jennifer, admitted enjoying time spent with the public, albeit the younger members of this visiting group.

Jennifer thought these interactions were of great benefit to young people, possibly shaping their future adult outlook. She had worked many rounds at this zoo and was now actively involved with the hand rearing of captives, which was an integral part of her shaping future-adults philosophy.

I have the opportunity to hand rear animals and take them home. I have taken home quokkas — we have lots of them and I have taken lots home. Deer, wallabies, we hand rear them to imprint them to humans. If the animal is not comfortable, we find them a new home. Like three goats [once captives of the Children’s Zoo], they got too friendly and we found them a new home. They were naughty!

The Baradian concept of emergence where things do not precede their intra-actions occurs in this keeper, captive, and home rearing entanglement, where “emergence’ ... is dependent not merely on the nonlinearity of relations but on their intra-active nature” (Barad 2007, p. 393).

Image 54: Quokkas in the Children’s Zoo being petted.



Nothing is pre-given when keepers home rear captives, in that being “not comfortable” creates differences in outcomes, and where being “entangled is ... to lack an independent,

self-contained existence” (Barad 2007, p. ix). It is not just humans choosing which captives are suited based on ‘set’ criteria, rather everything that occurs informs everything that happens, where exclusions and inclusions about what matters must be thought about (paraphrasing Barad 2007, p. 394). However, intervening in other life forms’ emergences is what a zoo does.

Even amongst keepers what is ‘best’ — for captives, keepers and visitors — has various meanings. For example, Jennifer also thought this section of the zoo was underappreciated by the wider keeper / staff / administration community.

The children’s zoo is different from other sections in the zoo. A person wants to be here. Other sections see themselves as ‘more important’; I think children [through the attempts at] education, are more important. You can affect a child way more than adults. We can go to the classroom, and the children can be close to the animals, rather than [how it is] in the rest of the zoo. The children should want to conserve the animals after such contact. Children don’t want the ‘specifics’ about a species; you want them to engage with animals, to have a connection with them. The initial connection is so important. Outside of the children’s zoo, they only remember the animal in an exhibit, here they remember: *it licked me on the chin!*

For Jennifer, re-connection to nature is underlined and emphasised as of great import, a notion that supports the official public mediation of the zoo to the community.



Image 55: Children’s petting zoo captives.

However, the keeper addresses it from the perspective of this part of the zoo being under-appreciated by the other “sections” that perceive their rounds as more important. A Senior Keeper elsewhere *had* offered a negative assessment of their time in the Children’s Zoo:

I have been on most of the rounds. I was Senior Keeper of Herbivores, and keeper for giraffes, hippo and the Children’s Zoo — you are too exposed to the public and a lot of crap goes on down there. I prefer to be out of sight and out of mind.

So, not all the work of keepers was valued equally by keepers, especially if they had to *perform* that work. Even from a distance of having worked at those duties in the past — as this example from the Children’s Zoo reveals — this keeping work was ranked lower by some keepers.

Volunteers also enjoy working relationships with keepers at various times and events. For example; keeper-volunteer contact during behind-the-scenes tours; or when distributing items for captives from BEEZA volunteers (Behavioural Environmental Enrichment for Zoo Animals); when communicating about data gathering from / to Zoo Watch volunteers; and when Pot-a-zoo volunteers were directed during horticultural planting. Many narratives are reported about these intra-actions with keepers, amongst the volunteer cohort. My personal experience is that this communication has cachet within the volunteer group. In guide training we were told not to interrupt, speak to, or bother keepers. But communications between keepers and volunteers still occurred, and I understood that this particular communication imparts respect, or admiration, to volunteers from volunteers. This was in spite of — or more probably because of — the training admonition *not* to do so. Keepers are the highest form of internal zoo knowledge about captives, and volunteers connecting with keepers is transgressive, and thus, daring; hence the cachet.

One guide, Benita, on watching long-term volunteer, Robert, speaking to a Senior Keeper, said to me, “we were told not to speak to keepers in our training, and you learn so much from them!” Benita reiterated this to Robert upon his return and he replied, “I don’t know why they say that to volunteers.” Benita, encouraged by this opinion, was emboldened to state:

I am going to speak to keepers! Why would they tell us not to? I won't interrupt or anything, but I will speak to them. Up till now I have said nothing!

To which Robert laughingly replied, “that is not like you. You are always acting independently!” And Benita said, “I know. But it was really hammered home, wasn't it Gail? I concurred. This mantra had indeed been ‘hammered home’ during volunteer training.

These relationships are policed because, “a different material-discursive apparatus of bodily production materializes a different configuration of the world, not merely a different description of a fixed and independent reality” (Barad 2007, p. 390). Volunteer and keeper relationships are a different apparatus – different from zoo management — to perform zooing. Entangling keepers with volunteers pose risks of alternate outcomes and narratives and, therefore, relationships are policed — disconnected — to ensure that the representations of management remain prime. Relationships were policed in this way, not only between humans, but between captives and humans as well. One example, of this volunteer-captive relationship policing, involved the female, Double-wattled Cassowary (*Casuaris casuaris*), “Cassie.”

### **Cassie**

Cassie was born in 1995 and arrived in Adelaide 18 months later (Males 2014, p. 24). During much of my fieldwork, she was living a solitary life, as is her species wont. Her enclosure cornered around an intersection where the well-trod, main thoroughfare, transects with a quieter avenue that displays local (South Australian) bird life. Double-wattled Cassowaries inhabit rainforests in southern New Guinea and northern Queensland and are the world's third largest flightless bird (ratite). In Australia, Emus are larger, and, from Africa, Ostriches larger still.

Cassowaries use a sizeable claw, one on each strong foot that sits between two toes, as a tool for food search (fruit) and as defence mechanism. They are deemed dangerous to humans in their ability to disembowel with this set of defences, which explains the particularities of Cassie's strong zoo fence. She often stood just the other side of this tall, narrowly space-barred fence eyeing off passers-by and occasionally ‘booming’ to them.



Image 56: Cassie the cassowary in her enclosure.

Link to a captive cassowary booming (not Cassie): <https://www.youtube.com/watch?v=3wB3BKHmxZ4>

She would bend her head down to her feathered chest, arch her bent neck, and emit a dull, throbbing, deep rumble. This was a resonance of, “very low frequency ... This boom is the lowest known bird call and is on the edge of human hearing” (Males 2014, p. 24). You can feel this boom in your feet, the sound waves registering body length in humans, or at least they did in my body.

Many volunteers boasted they could make the cassowary perform this boom and would often attempt to do so. Some would merely ask Cassie to boom, speaking as to a pet, in a singsong voice. My notes state, on watching one volunteer-Cassie encounter where the volunteer spoke to the nearby bird: “Hello. Hello. Are you going to speak to me today?” After which the Cassowary began to deeply boom. Other volunteers would imitate a boom, putting their chins to their chest and pushing air through the narrowed gap in their throat. They would then stand and allow Cassie time to ‘reply.’ Whether a reply would come or not didn’t seem to bother people. Betty, a fellow volunteer, spoke to the large bird peering at us through the fence and asked for her to boom, to no avail. “Not today girl? OK.” And to me “People think you are mad talking to the animals!”

Then, in one of the manager-to-volunteer communications, this behaviour was questioned, and requested to cease. The message read:

Please take note that the Keepers have been very distressed to see volunteers trying to make our cassowary 'boom'. Please be aware that the cassowary makes the 'booming' noise when feeling threatened, so you are actually upsetting the bird. I'm sure many people would have thought the bird was enjoying the interaction in this way, but now that it is clearly not enjoyable for the bird, we hope that this will not take place in the future. (Volunteer email 10.07.14)

Volunteers who had previously 'spoken,' and interacted in this booming with Cassie, had an emotional response to this missive. It was 'not clear' to people at all, that this was not an 'enjoyable' interaction. Some were dismayed that they may have inadvertently hurt, or 'upset' Cassie. One volunteer, Vince, shaking his head, asked: "Did you read that?" I confirmed that I had, and he continued. "I don't think she is acting defensively when she booms. I have seen her angry and maybe frightened, but, well I don't know." Vince was someone who was proud that the cassowary would boom for him and had interpreted this behaviour as a greeting. He would wait for the bird to boom, pleased that she did nearly every time he stood and cooed. His interpretation of speaking gently to the cassowary to encourage a boom was at odds with the interpretation given by the zoo.

After perceiving the different reactions to the cassowary, and the interpretations given by people, I searched the Internet, scrutinising web pages of wildlife parks and various other spaces to see how cassowary booming was interpreted. At most sites with attached videos, rangers / keepers fed the bird then sat back, usually with some sort of media / documentary crew, to wait for the boom. Interpretations of the bird's behaviour were absent and seemingly attempting to make the bird boom deemed just another activity for the tourists and / or media people.

At the zoo, agentially, the cassowary boomed, and management, keepers and volunteers narrated alternate interpretations of this event. The administrative discourse was to stop particular people from performing actions to attempt to make Cassie boom. Discourse, as a shaping and shaped practice-process, which "constrains and enables what is said and done" (Barad 2007, p. 146), has, in this cassowary's life, entangled layers of zoo meaning about species behaviour, and what is and is not 'cassowary. In other aspects Cassie was considered an 'emotional' captive according to her keeper.



Image 57: Note the bars through which she *spat-spat-spat*.



Upon Cassie's demise her keeper wrote: "Temperamental at times, she certainly showed attitude

when she wanted and seemed to have distinct likes and dislikes towards certain people" (Males 2014, p. 24). This had been clearly demonstrated to me one day when a group of volunteers walked past the cassowary enclosure after a get together at a cafe. The bird erupted out from the dark shadows of the enclosure and put on an energetic display. A fellow volunteer, Amy, was attempting to hide her mirth. "Did you see Cassie? She hates Don! She followed him around and spat at him"

I *did* witness this behaviour. The cassowary spotted Don (a volunteer), hid, then ran around to where Don would appear (opposite the Chiming Wedgebills enclosure), sprang out from behind some of the flora in her enclosure, and pushed her large head close to the narrowly spaced rails and *spat-spat-spat* at Don's fast moving figure. Don did not look at her or acknowledge the cassowary's presence; he just kept walking. Amy was still giggling as she explained: "Cassie *hates* him." She said this with such glee that I laughed. I asked her *why*, but we were moving, and fast approaching the now stationary group of fellow volunteers.

This was the 'temperament,' referred to by the keeper, of one amazing captive. Apparently, this behaviour had been ongoing for some time and conjectures as to why Don was singled out were articulated, and argued over, rejected and generally laughed at by guides. No one approached Don about it, and he did not speak of it. He ignored the

behaviour and — it was alleged, although never supported by evidence — he avoided the cassowary's enclosure area (which is possible, but onerous), and it seemed to be general knowledge only amongst a small coterie of long serving volunteers. Obviously, as the keeper mentioned in Cassie's eulogy, there were others singled out for this particular bird's 'dislike,' but I never discovered another 'chosen' disliked. Although, when volunteers were asked to stop making the cassowary boom people did mention that those singled out, as 'dislikeable' by the cassowary, were possibly to blame for the management directive to cease attempting to get her to boom.

As a case of anthropomorphism — attaching human emotions to other animates — Cassie the cassowary's case was interpreted by humans divergently. The cassowary disliked and spat at 'some' people, boomed on request for others, and was deemed temperamental by her keeper. What cassowaries 'do' *in situ* was placed as evidence for volunteers to stop booming at the cassowary *ex situ*. Human control was about controlling the human volunteers, not the cassowary. "Humans are neither pure cause nor pure effect but part of the world in its open-ended becoming" (Barad 2007, p. 150).

The cassowary boomed or not, becoming cassowary with its surrounds, and volunteers ceased attempting to get the cassowary to boom, although many questioned the reasoning behind the request. Humanist arguments set up a dualism, *in / ex situ* cassowary that kept nature at bay by controlling human behaviour.

## **Conclusion**

Understanding *keeping* as collegiate endeavour made understanding my field easier because keeping depended on relationships and responsiveness. Keeping underscored the stasis of past-present management representations that attempted to bring movement — in the form of progress — to so obviously a static situation; the Giant Panda pairing. According to Barad, in the universe, and thus at the zoo, "(n)ature is neither a passive surface awaiting the mark of culture nor the end product of cultural performances" (2007, 183). The Giant Pandas were the nature upon which many cultural markings were attempted. This insight underpinned and blended with fieldwork.

Giant Panda management representations that began with Chinese earthquakes, were represented as necessitating dispersal of the species for breeding purposes in overseas zoos. This, it was argued, would aid in panda species survival, with the additional representation of nature theatre builds in zoos to allow for ‘natural animal behaviours’ and, eventually, a return to a ‘wild’ *in situ* habitat. Yet previously, zoo management had argued that this same *in situ* habitat had been categorised as ‘hemmed in,’ and earthquake prone. This was ‘marking culture’ on the reality of earthquake agency.

My interlocutors experienced the beginning, middle, and end of many panda management representations of progress and were underwhelmed by the exclusions and moving metrics being utilised. For example, conservation messages that surrounded Giant Panda becomings reveal representations of progress, offered by management at the outset of the zoo’s panda journey, as an *exclusion* of matters as much an *inclusion*. Given that the measuring apparatus was the zoo, the properties offered as determinate were questionable, because of what had *originally* been excluded from their narratives (Barad 2007, p. 19). This was illustrated during fieldwork in the bears reproductive agency, because they never mated, let alone reproduced. This is an example of Giant Panda agential realism, where, “the forces at work in the materialization of bodies are not only social and the bodies produced are not all human” (Barad 2007, p. 225).

Representations around conservation and the reality of keeper work exposed the differences in people’s understanding of what progress means at the zoo, as well. For example, conservation as a matter of local rather than iconic species was referenced by keepers, while failures in preventing smuggling and consensus of what to keep in our region — another limitation due to space, time, and matter / spacetime — create monocultures within and between Australasian zoos, and thus, in keeping experience. Technology, in structures and biologics, as the new ‘spectacle’ do not resonate when keepers lament exotics securing capital while local species diminish. Narrowly defining responsibility to areas that are then represented as signifying conservation, limits both understanding conservation and any outcomes from the attempt that do emerge: a use of metrics that makes the practice debateable at best, unacceptable at worst.

Barad's posthumanist toolkit expands conservation knowledge, in these given examples. They also reveal how this knowledge is manipulated in representations that achieve limited conservation but cause much angst amongst zoo workers. These are differences in understandings about zooing, and they spell out, "which differences matter, how they matter, and for whom" (Barad 2007, p. 90).

Finally, there are the worlding differences between keepers as to what marks good keeping, good experiences, and good zooing. Relationships are policed at the zoo in order to represent the zoo as management narrates, but unusual relationships emerge in spite of policing. Keepers defend their rounds against fellow keepers when rounds are deemed as less 'spectacular' or 'not best practice.' Volunteers reject training, declaring they *will* speak to keepers, and when a cassowary entangled herself in liking and disliking people — how dare she? And when volunteers attempted to communicate with her — how dare they? Once again, the representations offered by management to explain Cassie did not resonate with emergent experiences.

Many 'rational,' official, zoo representations of human control and progress faltered, as they were attempts at holding "nature at bay" (Barad 2007, p. 375).

We are responsible for the world of which we are a part, not because it is an arbitrary construction of our choosing but because reality is sedimented out of particular practices that we have a role in shaping and through which we are shaped. (Barad 2007, p. 390)

Rationality alone fell short of explaining entanglement between life forms and Other matter/s. To better explain zooing also required diffracting the shaping practices and experiences of working, pleasure, loss, absence, and insight.

In chapter seven, a perspective on relational reality is examined, where the aesthetics of our thinking, including the emotions, has been absented in favour of purpose-filled, rational, thought. Bateson (1972), and his holistic, systemic wisdom reveal keepers and captives entangled as zoo becomings through a prism of western humanism.

## *Wisdom and Beauty*

Most of us have lost that  
sense of unity of biosphere and humanity  
which would bind and reassure us all  
with an affirmation of beauty.  
(Bateson 2002, p. 16)

### **Introduction**

In the third quarter of the 20<sup>th</sup> century, zoos turned towards an eco-ethos in response to varied oppositions to their existence (*c.f.* Anderson 1995; Frede 2008; Grazian 2012; Mullan & Marvin 1999).<sup>64</sup> Bateson suggests that the western ‘turn’ to ecological thinking is an attempt by “Occidentals” (2002, p.3, p. 7, p. 29) to re-enter the sacred:

We are beginning to play with ideas of ecology, and although we immediately trivialize these ideas into commerce or politics, there is at least an impulse still in the human breast to unify and thereby sanctify the total natural world, of which we are. (Bateson 2002, p. 16)

Occidental humans — referred to as humanists or westerns here — in presuming our compartmental-separateness from the rest of the universe, have lost the sanctifying unity of holism by presuming a hierarchy, with the top rank occupied by the rational Human. Bateson (1972) argues that wisdom is part of our perceptive spectrum because *not* having emotional and rational responsiveness to our ever moving / changing surrounds means we make basic mistakes, as we, too, move and change. Being entangled within the universe / earth / nature means both evolving with it and altering it, and ourselves, as we move and change. This circuitry of movement and not being aware of this circuitry — not including circuitry when we manipulate matter/s — can have dire results.

What has happened is that *purpose* has determined what will come under...  
inspection or consciousness.... [where] Conscious purpose is now empowered to

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<sup>64</sup> As discussed in chapter three, *Zoo History*.

upset the balances of the body, of society, and of the biological world around us.  
(Bateson 1972, pp. 439, 440, Original emphasis)

Wisdom, as comprehending the aesthetics or beauty of life, is part of being alive. When we use only logical processes and practices and absent beauty — that is our human emotional practices and processes from our entanglements — we also absent our wisdom from them. This is Bateson’s holism or systemic wisdom. “If you follow the “common sense” dictates of consciousness you become ... greedy and unwise... I use “wisdom” as a word for recognition of and guidance by a knowledge of the total systemic creature” (Bateson 1972, p. 440). Western humans have become greedy and unwise, even though like all other matter/s — including Other humans — we are systemically entangled.

Bateson argues that we cannot begin a theory of mind or cognition with a presumed separation between the human and an external environment. The human — and this includes perception, cognition, language, and technology — is an ecological *involvement*. (Chiew 2012, p. 46, Original emphasis)

As such, we are part of Bateson’s ‘ecology of mind’ where various researchers interpret this as a connectivity-with-all that bothers the boundary making of humanism’s individualism (Chiew 2012; Mengel 2008). Harries-Jones (2005), for example, argues for “ecology of mind,” as a “communicative interconnection among all living organisms” (s1/13). Furthermore, these circuit processes share similar organisation relationship-patterns and, therefore, are systemically immanent (paraphrasing Mengel 2008, p. 224).

Bateson’s insight, which he formulated as an ecology of mind, overcomes traditional dualism by recognizing that mind is not a thing, but a kind of pattern, a metapattern that is particular to living systems. He proposed, therefore, that ecology and evolution are actually mental processes and that the particular mental process known as the human mind is best understood as a subsystem of these larger processes. (Mengel 2008, p. 224)

Further, *eco* perspectives, containing both rationality and aesthetics have self-correcting properties and therefore wisdom. When these are engaged with conscious purpose however, the default setting today is the limited responsiveness of the quantifiable, “monetary value” (Gleeson-White 2011, p. 8). Moreover, rationality has overtaken

wisdom because the intensity and complexity of technology make rationality more effective / efficient, that is, techne empowers and thus intensifies the outcomes of purposiveness (paraphrasing Bateson 1972, p. 440).

Relying on human ‘conscious purpose’ leaves out matter/s of which we are unaware, or aware and uncaring about, or caring but have alternate values that impinge and inhibit that caring, or combinations / variations of all of these.

Emotion must interact with reason on its own terms: the terms of unrestricted contexts, broad integrated views, and an emphasis on overall reality rather than on methods, short-term objectives, technical details, and contrived goals for closed systems that do not exist. (Ehrenfeld 1978, p. 154)

In other words, “love” does not “survive” when the circuit structures are not recognised and listened to, and therefore wisdom does not prevail. In this respect, conscious purpose coupled with technologies is, “not to act with maximum wisdom in order to live, but to follow the shortest logical or causal path.... a short-cut device to enable you to get quickly at what you want” (Bateson 1972, p. 439). Bateson argued the universe becomes eco-systematically, that is, evolution is a symbiotic “relata” where agencies / energies inform and change surrounds at multi-scales, and vice versa (paraphrasing Bateson 1972, pp. 338 and 339). He warns that in such a universe, when combinations of intense matter manipulations, as occurs with current techne, entangle with the dualism of human exceptionalism, paradox or illogicality erupts. “That is the sort of world we live in — a world of circuit structures — and love can survive only if wisdom (*i.e.*, a sense or recognition of the fact of circuitry) has an effective voice” (Bateson 1972, p. 146).

Working with earth Others can offer a glimpse of beauty, that is, Bateson’s holistic systemic wisdom (1972, pp. 432-453). I examine a few keepers who articulated resistance to the conscious purposes of zooing. Although keeper wisdom was astonishing, it often came to nought, that is, against management, keepers articulated resistance that did not appear to have “effective voice” (Bateson 1972, p. 146). And at the time I wondered why. Gregory Bateson offered clarity about this outcome, and this chapter is its explication.

## **Arrangement of chapter**

My entanglement with a Superb Lyrebird, named Chook, begins this chapter. Chook's recursivity took my attention as it spanned scales of spacetime from *geologic*, when the 'continents' were one mass, to *cyber*, where 'zoo visitors' are a global presence. Chook's narrative is remarkable in coverage / scale of temporality, locations, and matters, through which he, and his species, emerge. Yet, it is useful as a guiding narrative, because it remains a simple one to follow, even with all the embroiled meanderings, misunderstandings, and meanings. Following on, I examine the limits of conscious purposiveness — what I think of as purpose-filled, rational thought — as applied in current conservation attempts and how incorporating holism, which Bateson refers to as "wisdom," alters meanings and emergences, and gives insight into the limits of acting and thinking with conscious purpose *only*. Then I use these insights to examine zoo practices and processes which entangle with captivity in contexts of species, keepers / keeping and management. Zoo manipulations do not control whole systems, but patterns emerge to which life forms — captive and human — respond. For example, South American primates have their own way of zooing to which keepers respond. In this way, primate sensing / experience by both captives and keepers, is entangled in all 'matter' of emergences; from food specificities to unacknowledged deaths and from public speaking to audit culture. That is, zooing incorporates patterns of becoming. One 'becoming' is human exceptionalism and its zoo-emergence is explored. Finally, I examine how keepers deal with reduced agency, which gives glimpses into the familiarities, frustrations and fun of keeping. I begin with Chook, the Superb Lyrebird, and his splendid, spacetime-mattering systemic circuitry.

## **Chook-loop**

Chook lived at the Adelaide Zoo for twenty years, and, during my fieldwork and writing up, he and his species kept cropping up, and returning the same-but-different, within my field of interest. As eastern Australian natives, Superb Lyrebirds:

...use their powerful legs and claws to rake leaf litter for worms, grubs, and insects. These shy ground-dwellers have elaborate and cumbersome tails in the shape of a lyre.... [and are also] notable for their vocal abilities. Feathers and voice come together in their courtship display, when they bring their tail over their body and head, vibrating it as they sing and dance. (Taylor 2014)



Chook was a hand-raised bird, and, according to keepers, this made him a difficult breeder. He preferred humans to female lyrebirds such as Rufous, the resident female lyrebird. One bird keeper specified Chook, “was far more interested in keepers, preferring to perform his display for them.... This was always a highlight for any keeper who looked after this round, as it isn’t every day a male lyrebird performs his ritual directly at your feet!” (Backhouse 2012, p. 8).



Image 58: Chook displaying  
(ZoosSA 2012h)

Link: <https://www.youtube.com/watch?v=iWitAc7-MgU>

After an exhibit changeover, Chook’s performances became more accessible to visitors, and people attended the zoo, and / or its online presence, to experience them. “Within this aviary Chook received a lot of media attention and he quickly became a YouTube sensation” (Backhouse 2012, p.8). My fieldwork ‘Chook-loop’ began one day with Laurel during her volunteer guiding shift. Visitors approached us in the Australian Rainforest Aviary and asked about the lyrebirds. They asked Laurel, “are these female Lyrebirds?” They were, but what they wanted to experience was Chook, the male lyrebird.

As international tourists, they had already visited the other Australian capital cities and were attending this zoo because they wanted to see YouTube’s *famous* lyrebird. Laurel took them out of the Wetlands Aviary and over to Chook’s meshed home, a bushland recreation he shared with Eastern Whipbirds, Regent Honeyeaters and a Long-Nosed

Potoroo. Spatially, this exhibit abuts the new ‘Panda Forest’ but neither enclosure is directly accessible to the other. Chook’s enclosure sits in a cul-de-sac, while the pathway for the Panda Forest meanders adjacent to the main thoroughfare, past the Flamingos and Australian Pelicans, and has two egress points. Visitors are unaware of this topographic adjacency but, it is argued, this location provided Chook with his memorable repertoire (Backhouse 2012, p. 8). In 2009 his keeper had uploaded a YouTube video documenting Chook’s range of mimicry, stating he had, “a really great repertoire of different types of birds.... kookaburras or rainbow lorikeets.... and he can speak as well.... humans speaking.... he does drills... cars starting etc.” (ZoosSA 2009c). Chook’s zoo location, with its profusion of city zoo sounds, provided him with a repertoire smorgasbord. Closest by were other Australian and exotic birds, passing keeper two-way radio talk, local traffic and, during the adjacent Panda Forest build, the sounds of human construction.

This particular sensorium provided the male lyrebird with a cacophony of builder’s equipment audio-surround including, truck reversal warnings, nail guns, drills, and more two-way radio calls, this time between builders. The male lyrebird was privy to the sound of, “saws, hammers and metal sheeting being installed into place with the use of a drill — he even managed to imitate the drill tensioning the screw into place!” (Backhouse 2012, p. 8). For these international visitors on this particular day, Chook was scrabbling through the leaf litter, going about his daily life. He looked a little less than masculine, with his depleted “Greek Lyre” tail feathers, which Laurel explained are shed after mating season. Laurel continued the narrative of information on lyrebirds, including their dimorphism, life expectancy, and number of eggs and she eventually arrived at this particular bird’s fame. However, these visitors knew about Chook, they were here to enjoy a sensorially resplendent lyrebird, which for now remained scrabbling away at the undergrowth.

After a while, Laurel took us down the cul-de-sac, which adjoins the (unseeable from this position) Panda Forest, to point out the local marsupial occupants of quokkas, as well as various aviaries bristling with small, colourful, and / or songful, Australian birds. One visitor stayed near the lyrebird enclosure and, as we walked back towards Chook, this visitor motioned us closer, asking us, “Can’t you hear?” Holding a phone-camera upon a

now perching Chook who was performing his routine — drilling sounds, nail gun, and reversing truck. The visitors were ecstatic, laughing and whispering animatedly, as each new sound emerged from the lyrebird. Laurel and I left Chook with his rapt visitors. We too whispered and laughed at his timely performance.

The building works for the Giant Pandas and the industrial sounds incorporated into Chook's repertoire occurred before my fieldwork, his death occurred during it. The visitors celebrated their attendance at Chook's performance only a short time before his demise. I noted his death and did some searches on his 'fame.' Chook had registered as 'special' by keepers, who then recorded, and uploaded his mimicry onto YouTube. By the time of his death, he had, "been watched more than 1.15 million times" (Noonan 2011).

The sounds of industry emitted by this captive bird can be acoustically interpreted. For example, by giving just two interpretations, Chook's performance can be perceived as the noise of twenty first century industry through the sound pollution endured by other life forms, or, as the sound of an attempt at Panda conservation. According to Smith (2003) the definers of sound choose the paradigm in which it will be mediated. The zoos' narrative positioned Chook, not as enduring the noise pollution of human industry, or as a side effect of conservation, but as utilising his surrounding affordances by incorporating them into his courtship display.

Sound operates as reality and as a construction, sometimes simultaneously, and because ... soundscapes may be both actual environments and abstract constructions we must treat them as both. (Smith 2003, p. 138)

Smith argues that "keynote sounds" are an organic emergence from landscape but "may also be produced by specific configurations of social and economic relations and modes of production" (2003, p. 159). Chook's vocal inclinations were situated and used as attributes for the zoo's 'social and economic relations,' as promotional videos for the organisation, and in updates for zoo-members in various mediations.

Further, by including the man-made soundscape of construction in his mating repertoire, Chook could anthropomorphically be said to value human sounds and reciprocally, our

appreciation of his performance. Chook's catalogue of human mimicry became a 'keynote' sound for the zoo, and through its Internet dispersal, it escaped the boundaries of the Adelaide Zoo and became internationally renowned. "Chook used to dazzle the crowds with his mimicry" (Backhouse (Keeper) in Noonan 2011). This one little bird drew people from across the globe into his space-time-matter.

Upon death he received a memorial on Facebook and in the Zoos SA newsletter *Keeping Track* (December 2011), which stated that,

Chook was well known among staff, volunteers and the public with hundreds of comments and tributes rolling in on social media following the news of his death. (ZoosSA 2011c)

Sometime later the guide, Laurel, retold this visitor narrative to a guide group at morning tea, without remembering that I had been the person with her that day. She remembered the international visitors' delight at the lyrebird's performance.

Yes, I was glad they got that on record before he died. I suppose they know he died. They probably checked out the Adelaide Zoo website.

For Laurel, the visitors who once came to this space to visit a bird first experienced on YouTube, and then 'in person' at the zoo, evoked a pleasurable memory. Laurel presumed they would know that the bird had died and be thankful that they had visited Chook in time and recorded his repertoire before it was too late. This stretching of the boundaries of one captive inhabitant to the farthest reaches of the globe was an acknowledged acoustic relationship to this guide. Chook's "keynote" zoo sound cut the divide between the real / unreal and was both of the space and a construct (Smith 2003, p. 159).

However, this performance looped into other lyrebird performances and, as told in an article by Taylor (2014), became part of another pattern that is real / unreal, of the space and a construct (Smith, 2003). David Attenborough had utilised three separate lyrebird mating / territory performances in a report voted his *Number One Favourite Nature Documentary* piece (ABC 2011).

We see compelling footage of a bird imitating a camera’s motor drive, a car alarm, and a chainsaw. This Attenborough moment is highly popular — but hold on! He fails to mention that two of his three lyrebirds were captives, one from Healesville Wildlife Sanctuary and the other from Adelaide Zoo. This latter individual, Chook, was famed for his hammers, drills, and saws, sounds he reputedly acquired when the Zoo’s panda enclosure was built. Hand-raised from a chick, he was also known to do a car alarm, as well as a human voice intoning “hello, Chook!” (Taylor 2014)

Taylor is part of a research group attempting to find the originating impetus behind a famous lyrebird sound. Taylor uses an analogy of sound plus location, a “flute ...territory” (2014), to describe what her research is seeking amongst a particular Superb Lyrebird population. That is, why do *these* lyrebirds sound like *this* when other populations do not? Hence, her interest in Chook’s unacknowledged BBC television appearance.



Image 59: Chook in close-up on *Attenborough* (BBC.com 2014).

Link: <http://www.bbc.com/travel/story/20140416-an-australian-bird-that-mimics-the-sound-of-a-chainsaw>

Making a bricolage of captured and wild lyrebird performances and presenting them as representative lyrebird performance (BBC.com 2014) conflates, and glosses lyrebird vocalisations. Taylor’s flautist research states:

...there is no known recording of a lyrebird in the wild mimicking man-made mechanical sounds. Nevertheless, belief in such a phenomenon is now so well established on the internet that it even crops up on official sites. (Taylor 2014)

One example crops up on the Australian Broadcasting Corporation (ABC 2011). In reporting *Chook's* death, the ABC did not attribute him as the, “lyrebird imitating a chainsaw, camera shutters and a car alarm in his [Attenborough's] 'Life of Birds' series.” They referred to the Attenborough piece as bringing the species “to a global audience” (ABC 2011), without realizing it was the deceased bird being reported upon that had featured as the mimic of human constructions that went viral; a feedback that fed back into living processes (Harries-Jones 2005).

Since all this Chook-looping information transpired — that is the incorporating of human construction into his repertoire, his YouTube fame, international visitor enthusiasm, Attenborough conflating wild and captured birds and the recursive loop back into the narrative of wild or captured birds imitating human matters — another loop enters the patterning. Two researchers had been attempting to show that songbirds originated in Gondwana,<sup>65</sup> upon the landmass now known as Australia. “All songbirds evolved from them — the 'old world' birds of Europe and North America are just a twig off a branch of our Aussie birds” (Hobbs 2015).

Drs Les Christidis and Richard Schodde had suggested this originally in 1986 and were still being interviewed about it (in Australia) in 2007, before the Panda Forest construction: “What's really interesting is that the lyrebird is part of the oldest group of songbirds, and then we got things like the bower birds, the honey eaters, and our robins” (Christidis in Demasi 2007). By 2015 there was speculation that ancestrally the Superb Lyrebird was, “the closest alive today to the very first songbird that ever evolved” (Horstman 2015) . Which is an amazing loopback to Chook and a pattern that also interweaves other loops into its patterning.<sup>66</sup>

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<sup>65</sup> “Some 250 million years ago, the continents were gathered together into the vast supercontinent of Pangaea.... over the following millions of years Pangaea began to break apart and form, in the south, Gondwana (present-day South America, Africa, India, Antarctica and Australia)” (Snedden 2015, p. 80).

<sup>66</sup> The ABC did acknowledge, much later, that it was Chook in Attenborough's piece in *News in Science* ‘The sounds of science’ B Hobbs 13<sup>th</sup> August 2015, but still seem to think these sounds occur *in situ* as the birds are good “dobbers,” (informants, in local slang) <http://www.abc.net.au/science/articles/2015/08/13/4292661.htm>



Image 60:Pangea  
(en>User:Kieff 2009).

The misunderstanding about Chook's 'Attenborough performance' did not seem to have wide reaching repercussions, but it was researched and noted by Taylor (2014) because the YouTube / TV documentary footage does conflate wild birds doing captive behaviours. She had to pursue this line of inquiry because of the conflation. Back at the zoo, one of my fellow guides thought that the female lyrebirds, which were in another aviary nearby, were now mimicking *more* than when Chook was alive.

Yes. I think they mimic Chook, now that he is gone. No one seems to think the female lyrebirds mimic, but they do!

During guides, I had visitors ask me if these females were Chook, and I had to tell them that he had died, but that female lyrebirds mimicked 'too.' This absence of knowledge, and its illogical outcomes, after such a rush of interest and seeking knowledge about this species underlined limitations of Chook's fame.<sup>67</sup>

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<sup>67</sup> Thinking that female lyrebirds, including Rufous, would sing and mimic Chook, and not the origins of surrounding sounds, seems confusing. The females may have sung more or less after his demise - I am unsure of this.

The enthusiasm of bird keepers, various volunteers and some international visitors kept the movement of Chook and his species within my research navigations well past my fieldwork. The surrounding birds — captive and wild — and other nearby species that Chook mimicked would have noted his absence in calls of their vocalisations: one less sound in their surrounds.

Because Chook incorporated the techne of humans into his repertoire, humans took notice of this earth Other in ways that we would not normally take note, and this produced more patterns. For example, the keepers were aware of these abilities and spoke about them, wrote about them and told stories to volunteers and YouTube subscribers about Chook. The Internet, as a global access point, connected Chook, Chook's repertoire, the keepers and the zoo, to a wide human audience, and, of course, management utilised his fame in these and other mediations for 'commercial' purposes: he and his recursivity became a resource for the zoo. A resource that was extracted successfully as the attendance (and attention) of people from across the globe attests. The conscious purpose of commercial entanglements included the "unwise" mistakes and conflation from his global dispersal, which are still available to be experienced today. Chook stimulated my interest in his pattern and brought me to understand the beginnings of birdsong, as humans understand it anyway. Chook also gave overseas visitors one memorable, 'live' performance, and an anthropologist, grist for her mill.

Chook's recursivity, his systemic circuitry, is easier to unravel and follow, on its various zoo-flows, than other circuits of change in the place. For example, because they are more complex and require more 'bits' of information for me to gather into narratives 'about' zooing, groups of captives, or people, or events, have a complexity that inhibits simple narrative construction like that of Chook's recursivity, as described above. So, too, I am well aware of my energies / agencies around gathering / structuring narratives, because they are my deliberate, mindful, drive to create; that is, they are *my* 'conscious purpose' applied to *my* doctoral research. And this gives pause for thought because now I want to turn to the mindful drives, or what Bateson calls "conscious purpose" (1972, p. 440) of zooing as they impinge on the wisdoms that emerge as well. In the next section, I begin with an explanation of how parts and whole re-arrange one another and how scale-levels



matter, using Bateson and Harries-Jones (2004, 2005, 2008), who interprets him through a conservation lens, which aids clarity in the subsequent ethnographic section.

### **Conscious purpose and wisdom**

Bateson (1972) places conscious purpose (applied rationality) and wisdom, at cross-purposes in our reductive way of perceiving, where “mere purposive rationality unaided by such phenomena as art, religion, dream, and the like, is necessarily pathogenic and destructive of life” (p. 146). He also asserts that belief in our exceptionalism creates dualistic thinking — exceptionalism is the first divide — and belief in human progress and control. These beliefs then *support* the contrivances of conscious purpose, that is, they circuit back and feed into each other, and *absent* wisdom. That is, exceptionalism creates dualistic thinking and foregrounds conscious purpose, diminishing wisdom from our thinking. Further, because “consciousness is necessarily selective and partial... What the unaided consciousness (unaided by art, dreams, and the like) can never appreciate is the *systemic* nature of mind” (Bateson 1972, pp. 144-5, Original emphasis). Life forms are always in contextual, or systemic relationships — wherever that relationship emerges, even in a zoo. Further, systemic relationships are meta-patterns, that is, “*the pattern which connects*” (Bateson 2002, p. 10, Original emphasis).

Absorbing Bateson’s perspective means understanding that we can only know partially that which we perceive, *but* to comprehend the context of that knowing means entangling and comprehending what we do know holistically — that is *ecologically*. This is a level-up understanding of scale, or “secondary process” knowledge (Bateson 1972, p. 185). This does *not* mean from the god’s eye position or objective scientific position, rather it means from interconnected perspectives, which include the aesthetics or beauty of emerging in the universe. Bateson (1972) understood that a western holism encompassing aesthetics was a part-whole-part endeavour, a systemic circuitry practice of understanding, where, the “whole is always in a metarelationship with its parts” (p. 267). Harries-Jones (2004) is helpful here as he summarises Bateson’s aesthetics as a way to access western science’s eco-thinking. He argues that, “our civilization is in free fall because it knows little or nothing about the holism of its eco-dynamics nor the recursive processes of ecology” (Harries-Jones 2004, p. 158).

Further, western scientific endeavours into conservation currently quantify, gloss and conflate, through categorising and ranking, different meanings of conservation even as they attempt to codify how to deal with “global warming and its effect on ecosystems in relation to human poverty” (Harries-Jones 2008, p. 154). The spacetime/s of conservation are separated out and misunderstood, that is, they are not perceived recursively but are counted and compared quantitatively. Harris-Jones (2004), in applying aesthetic holism to a scientific ethos demonstrates the errors of western quantified applications and offers Bateson’s aesthetic holism as an escape from these errors.

The major investigation would be one of how parts fit into a holistic order, and vice versa, how holistic order is contained in the development of parts.... [and] acceptance of the idea that holism, unity and beauty were coincident with each other and should be an integral part of any modern science deciding to investigate the game of life. Otherwise a science of ecology would be bad science. (Harries-Jones 2004, pp. 144 -145)

Wisdom is wholeness where we understand the surrounds-as / with-us, that is, as “a sense or recognition of the fact of circuitry” (Bateson 1972, p. 146). Aesthetic epistemology is where our minds are but a subset of universal mind and, where knowing or recognising this is to comprehend sanctity and / or beauty, and thus wisdom (Bateson 2008, pp. 19-20). To achieve wisdom, holistic thinking is required somewhere.

Ecology, as science, has very little room to stand outside of and observe, or attempt to experiment with, a fully integrated ecological system. Yet aesthetics, in the guise of perceiving patterns of part-whole relationships, enables the making of statements about ecological systems from within the system itself. (Harries-Jones, 2008, p. 162)

From *within the system* is where all, or any, of our statements can be made, scientific or not. However, I did not want to *polarise* the management’s applied purposes against any holistic wisdom I perceived in a maudlin or romanticised way. Rather, I wanted to see if zoning as work was, sometimes, systemically practiced, that is with an *eco*-mindset, where, “work, use, and instrumentality are intrinsic to bodily webbed mortal earthly being and becoming” (Haraway 2008, p. 71).

To explain how westerners' polarise conservation (separate out into a dualism), White (1995), is explanatory. He argues, environmentalists have romanticised wilderness as pristine places untouched by humans, so as to contrast them with the so obvious, and manifold, destructions by humans (White 1995, p. 172). From this perspective, human work — the extraction of resources — is seen by environmentalists as damaging and they promote leisure — as in national parks and similar 'nature' places — as the only human activity that is acceptable within nature. This polarisation between leisure, where humans merely play in nature, and work, where extraction takes place, is a reductive argument. White (1995) posits that human work includes the spectrum of our interconnections with this planet and as such is a contextual relationship (p.184). That is, the matter/s of leisure require energies spent — transport and thus fuel, manufacturing and all the matters of current technology — just like 'work' does; leisure too expends and utilises 'nature.'<sup>68</sup> Environmentalist thinking in this way leaves us still outside of nature, whereas working within, we become aware of our relation-connection *as* nature.

Most humans must work, and our work — all our work — inevitably embeds us in nature, including what we consider wild and pristine places.... It links us to each other, and it links us to nature. (White 1995, p. 185)

White (1995) argues we need to work, and as such, work is a good place to begin to understand our becoming with nature.

The intellectual, social, and political costs of limiting our choice to these two attitudes toward work and nature are immense.... We need to do better. The choice between condemning all work in nature and sentimentalizing vanishing forms of work is simply not an adequate choice. (White 1995. P. 181)

Environmentalists have used western ranking systems that place leisure as superior to work when deciding how to 'deal' with nature. That is, we are using the same toolkit to 'fix' our thinking that we utilised in getting us here (Chiew 2015, p. 4); dualistic ranking

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<sup>68</sup> Brown et al. (2004) state that these spent energies are the eco-metabolic rate where "energy and materials... are not fundamentally different ecological currencies that operate independently of each other to affect the structure and dynamics of ecological systems. They are inextricably linked" (p. 1786).

systems of separation. From this perspective, romanticising or sentimentalising keeper ‘work’ would be just another ranking to ‘explain’ any keeper wisdom. Attempting to perceive holism emerging through the work is what I aim to achieve — as in the already stated example of Chook and his species-specific performances. Through comprehending Bateson’s perspective, Chook’s recursivity and part-whole looping became a discernible pattern to me during writing up. Next, in a similar attempt, I examine zoo practices and processes entangling with captivity in the particular contexts of species, keepers / keeping and management.

### **A responsive return**

During one interview, feeding time for another set of captives threatened to intervene in the discussion, but the keeper, Craig, invited me to attend the scheduled captive-feedings. He opinionated: “This is like a behind-the-scenes tour for you, isn’t it?” I could only agree! Craig carried bowls of fruit and other foodstuffs for the inhabitants, as we walked around to the *Tamarin House*. This large, brick, structure has two divided sides with a visitor entrance-archway running through the middle. Walking into this public archway your eyes grow accustomed to the darkness as you walk past glass walls, behind which the captive-inhabitants — primates from the South American continent — reside. Most of the captives can either be in here in their tree-branched homes, where the air is conditioned for their comfort behind the glass, or they can venture through small openings to their outside enclosures. Outside, people meander down the ‘Pheasantry’ walkway, (possibly) unaware of the ‘inside’ choices these captives can make.

At first, Craig went to the outside exhibit holding Bolivian Squirrel Monkeys and opened a padlock that allowed him to control the hatch opening between the inside and outside enclosure. He spoke quietly to the inhabitants as he did this. A group of strolling-by visitors realized a keeper was going to feed the captives, and so they stood around watching as Craig tried to separate a male Bolivian monkey from the others.

Craig had told me a little about this group’s dynamics as we approached their enclosure, where the Brazilian Squirrel Monkeys were gallivanting about the glassed-in section of their enclosure. Every now and then, they thumped so hard on the glass, it seemed as if they would break out of there.



Image 61: Bolivian Squirrel Monkey (ZoosSA 2019)

Now Craig narrated the action to me as he made a monkey-separation attempt, so as to ensure they all got equal food. Craig's commentary focused upon one particular monkey that resisted all attempts at separation. His name was Marp Marp and Craig referred to him as the *King of the Squirrel Monkeys*.

He understands squirrel monkeys and he understand humans. We can't go in there with him; he just jumps on you and bites and pulls your hair. He is so naughty. I can go in with Oedipus [the father of Marp Marp] but not Marp Marp. It is no good hand rearing primates. They can't mate or breed, and they take humans for granted. It is a problem.

Craig continued trying to separate the King from his subjects to no avail.

He won't let me do it though, so I can't go in there to feed them. He was hand raised and he gets aggressive. They feel comfortable when they are hand raised and are not threatened by humans.

I was being informed that this particular monkey manipulated, or worked, his captivity to his benefit and the discomfort of keepers. "In the idiom of labor, animals are working subjects, not just worked objects" (Haraway 2008, p. 79).

Craig closed the hatch with all the monkeys still together, and invited me through a locked door, into the little side room of the *Tamarin House*; behind-the-scenes. The visitors remained outside looking in through the mesh awaiting the keeper to place food out for the captives. Inside the little room where I stood, packed shelves, cupboards, books, notices and other keeping ‘stuff’ took up all of the wall-space to the ceiling. *It’s claustrophobic* I thought.

Craig said to me, “I’ll be right back” and exited outside again, so I stood looking around me and taking notes. He explained, on his return, that he had closed the access point for the monkeys — with them all ‘trapped’ inside and Marp Marp occasionally banging on the glass — and entered their exterior enclosure, placed the food around into various bowls and onto tree-limbs then exited and opened the hatch for all the Bolivian Squirrel Monkeys to access the outside, and their lunch.

Now he stood mixing up a concoction of powdery flakes and liquid in a small, circular, tube. “What’s that?” I enquired.

Expensive gum. *Gum Arabic*; it is freeze-dried, it comes from under the bark of an Acacia Tree and it’s collected by poor nomads. That’s why it is so expensive.

I was confused: *Poor people collect it and, therefore, it is so expensive?* This sounded anthropological! We chatted about third world countries and ‘development’ for a while. Having made up the gum-paste and assembled various other foodstuffs, Craig now opened the second inside door to another glass walled enclosure, and went in. I peeked around the corner and spotted a Pygmy Marmoset, and then another!



Image 62: Pygmy Marmoset (ZoosSA 2017b)

They peered back at me from various positions within their *Tamarin House* exhibit as Craig moved around in there: tiny faces intent on my own. They kept a distance from him but kept looking at me. Very disconcerting! Zoo visitors stood looking into the marmoset exhibit through the glass, watching from inside the public archway area. Craig kept up a running commentary as he worked his way around inside the exhibit.

We have to be patient. Often, all you can see is a pair of eyes, and then this little face will appear and then the body. We have these pair and another. We hope to breed with this pair.

Craig spread the Gum Arabic on the branches of trees arranged from thick trunk to delicate cleft. He spread and pushed the viscous, white gum into little holes, and the crevices, cracks and fissures of various ‘limbs.’ I asked, “Is this like the sap they suck out of the trees in the wild?” His reply had me scribbling madly in my notebook, not wanting to miss a piece of information.

Yes, and just for guiding information, they have a more or less horizontal incisor at the top [jaw] to stick into the trunk and to anchor the top, then the lower incisors pull up [and puncture a hole in the tree]. They incisor so many holes in the trees to keep them weeping, it’s amazing! Pygmy Marmosets maintain these weeping trunks as a food source. They are not endangered. They are edge specialists. They live near farms and enter the fields for insects, and, because they are so small, they are difficult to catch, so they are not really taken for the pet trade.

As he had been speaking Craig mimicked how the teeth would stick out by standing side on — he was back in the side room with me by this time, having shut and locked the Pygmy Marmoset exhibit door behind him. His hands showed how the top incisor sticks straight out and the bottom incisor slants up. He is a good mimic and teacher.

Craig’s words coalesced into my understanding that these marmoset’s teeth act like a hole-punch / bottle opener — one holds the trunk, the other punctures it with the force of the hold. Clever! Now he informed me:

They should get it [freeze dried Gum Arabic] *every* day. We give them insects on alternate days, though.

Craig told me that he alternated the viscosity of the gum to match, or mimic, the different bleedings from the trees throughout their *in situ* home-habitat. He would make thicker to thinner batches to match both the stickiness of the gum on exiting the tree marmoset-teeth incisions, and on solidifying, if left uneaten for a period. That is, Craig attempted to redo / mimic the *in situ* 'back home' gum bleed.

We peeked through the door into the Pygmy marmoset enclosure to see the little faces up against the bark, sucking pleurably away (it seemed to me, at least). Craig and I talked about our experiences, and 'home/s,' and he told me something of his own nomadic life and experiences. He said he felt like he no longer 'fit-in' at the zoo. In answer to my question about some of the zoo's overseas conservation efforts, he answered:

I don't feel good about the conservancy things that are happening here. The work we do, and choices made. We are just supporting that [overseas effort] with some money, we aren't *conserving* anything.

He had completed feeding this contingent of captives and now we walked around to the other side of the *Tamarin House*, passing the public archway area as we walked. We went through a chain-linked gate and onto a little pathway cordoned off from the public area and entered into the same building, but on the other side of the archway. This was the behind-the-scenes section for tamarins. He said to me, "we call this the Tardis, like in *Dr Who*. Did you watch *Dr Who*?" I assured him that I had. From outside, the *Tamarin House* looks compact and this area looks too large *inside* to be a part of the outside configuration, hence keepers' naming this space as the Tardis. Craig immediately apologised for the state of the building and told me, sardonically, "I have cardboard holding it up at the moment."





Image 63: Inside the Tamarin *Tardis*, with the mouldy patched wall.

The cardboard was wet, mouldy and peeling away from the brickwork, but it covered a gaping space in the interior wall. As he moved around preparing food and cleaning up after himself, I took a long look-around, and it was easy to see why he had this particular response. This behind-the-scenes area is dilapidated, with mould and wet patches on the walls and cornices, and the cupboards and fittings are in bad need of upgrade too. It seemed in need of extensive renovations. I thought this captive food preparation area would take exhaustive cleaning efforts, and it would still never look 'good' but always unkempt, because of the lack of storage, and the need for a refurbishment. I remembered his care in placing the food for the primates on the other side, where the spread of food and the gum viscosity mattered — to him and his captives. “At the heart of encounters with the genuine...is the implicit operation of a sense often overlooked in aesthetics: touch” (Korsmeyer 2012, p. 366).

Korsmeyer is attempting to parse out the “genuine” encountered through the tactile in encounters that matter, where “genuineness ....is a literal property of an object that refers to the conditions under which it came into being” (Korsmeyer 2012, p. 376). He argues that touch audits the other senses to adjudicate the genuine. “Touch is the fallback sense that is used to confirm evidence of the other four; indeed, touch is in general veridical” (Korsmeyer 2012, p. 371).

For the primates under Craig's care, their *ex situ* existence at the zoo did not include the expensive gum every day, but under this keeper the consistency of the food would match as near as possible to the *in situ* experience. The nourishment he delivered for these *Other* life forms was, at base, a testament to how he did his keeping. Even though the practice of keeping was a world away from the lives of primates in South America this keeper attempted to make life as 'South American' as the limited conditions allowed from *within the system*.

This 'pattern' of keeper behaviour — to replicate wild or *in situ*, existence — I witnessed on different occasions. In Haraway's terminology this is "painstaking detail" in that, as work, it is "not romantic or idealist but mundane and consequential in the little things that make lives" (2008, p. 93). Keepers' aesthetic responses to the patterns they provided — for Craig the viscosity of gum *and* the damp cardboard walls — entangled captives. This is neither sentimentalising the keeping work I witnessed — rather, the work links to nature as White (1995) argues — *and* it demonstrates an eco-reading holism, where keepers are aware of the dynamics of their captives and the processes of *in situ* lives, as Harries-Jones (2004, 2008) argues for Bateson's eco-perspective. Keepers often articulated / demonstrated holistic attempts and the discrepancies that affected their captives during interviews. I pick this theme up further along, for now, I want to make a small journey into how human senses classify relations.

### **Sensing**

I had noted on behind-the-scenes tours that placing foodstuffs inside enclosures, and then watching the captives find and eat the goods is offered when the captives are considered too dangerous for hand feeding. As a 'genuine' experience, touching and feeding captives is the 'extra' on offer in these paid for tours. For the captives these tours offer food and interaction with various human primates. Studies on zoo behind-the-scenes tours refer to confusing codes where, not only different species, but also individuals within that species, offer diverse behaviours to be interpreted.<sup>69</sup> But overall, "very little is known about the visitor effect during close encounters involving any species" (Szokalski, Foster & Litchfield 2013, p. 85). Keepers mediated between the species — human and earth

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<sup>69</sup> "It has been proposed that various factors will account for a particular animal's response to humans – such as species, extent of handling in early life, animal personality and temperament" (Szokalski, Foster & Litchfield 2013, p. 100).

Other — on tours and, in doing so, afforded captives “opportunities to adjust to interacting with people” (Szokalski, Foster & Litchfield 2013, p. 101).

Craig’s apologetic explanations about his captive primate’s surroundings in these, usually, non-public areas — where his cardboard structural interventions and cleaning attempts did not improve the state of the place — was a disappointment (it seemed to me), *to him*. Inside the Tardis a less-than-best practice was on clear, unequivocal view; a practice that affected his charges experientially. In this *Tamarin House* husbanding-work area, captive and human sensory experiences — where touch plays an important and nurturing part — have to deal with wet, leaking, cold, mouldy walls; and it is experienced by visitor primates as well, on behind-the-scenes tours.

Contra to Korsmeyer (2012), Tuan (2005) argues that human tactility is, for the most part, a non-event often only anticipated *through* sight. “Most tactile sensations reach us indirectly through the eyes. Our physical environment feels ineluctably tactile even though we touch only a small part of it” (Tuan 2005, p. 76). The sight, the feel and thus, the experience, of this inside dilapidation was apologised for, and dealt with by Craig in his everyday work; to visitors on paid tours, to me a researcher and, most importantly, to his captives. Of note here is that the separation of human senses, divided out into each of the different perceptions involved, does not incorporate the experience of keeping for Other life forms. Tuan (2005) and Korsmeyer (2012) argue for their perception to be given primacy: Korsmeyer (2012) with touch and Tuan (2005) with sight. Reading each ‘holistically’ suggests sight enhances touch and vice versa, and in the process of perceiving each performs with / within the other. In other words, perceptions are relationships-of-perceptions that give deeper meaning to experience. The experience of keeping at the zoo takes in Other life forms’ perspectives when working to make the captives’ lives as best as possible, that is, keeper’s think with *systemic wisdom* from *within* the practices and processes of Other.

Keeping involves lots of matter — the stuff of their husbanding behind-the-scenes areas — and carting foodstuff matter, like wheelbarrows, and tools for hauling ‘stuff’ around. Then there are the captives and their experiences, their exhibits — outside and inside — as it was for Craig this day: and people, including anthropologists, management,

volunteers and visitors. Craig gave me a guide-training dialogue about his captives and a working knowledge of Arabic Gum and its backstory when we were together. His mind extended beyond touch and sight to experience, not only for himself but also for his captives, and to train me, and to allow visitors to watch him work, and to ease aggression in male monkeys. That is, his work was systemic in that it entangled more matter than just cleaning up enclosures and feeding zoo-captives within his practices and processes. Craig worked with nature rather than managing it. On show was, “wisdom” ... a word for recognition of and guidance by a knowledge of the total systemic creature” (Bateson 1972, p. 440). His keeping work, I argue, “embeds” him in nature (White 1995, p.185).

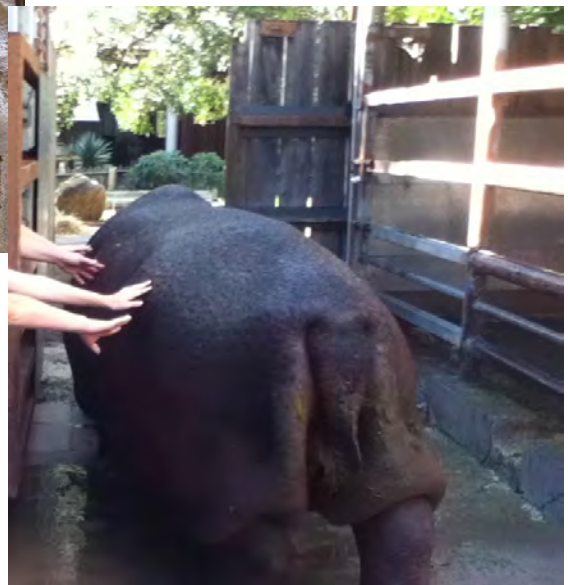
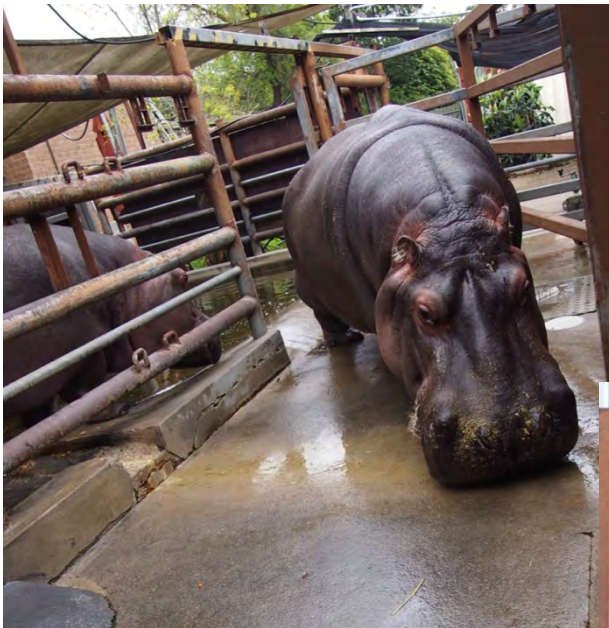
Various zoo experiences replicated this feeling within me, where an understated but demonstrated set of values was being followed that did not adhere to the ‘conscious purpose’ of zooing, but to the entangled practices of keeping. Keeping was responsibility and not accountability in that the whole was being responded to and not a compartmentalised zoo-slice. At other times the attempt at managing nature as a resource was more prominent.

For example, during various behind-the-scenes tours — an upselling value-add for the zoo — I noted that touch is often offered as an authenticating, or verifying, experience. On the hippo tour, for instance, visitors place or throw various herbivore foodstuffs (carrots or hay) through bars, into the hippos’ gaping mouths. Instructions are given to not let hands / fingers linger near the gape but to gently throw or place the foodstuffs from a slight distance to avoid snapped-together jaws.

Afterwards, visitors are encouraged to lightly touch / stroke the passing captives — on their large, lumbering sides — as they move from their night to day enclosures. Once again people are on one side of a large, well fortified, set of bars, through which they poke their arms to touch the passing ungulates. The ungulates appear to take no notice of any of this patting experience.



Images 64: Handfeeding and patting the hippos.



On the Big Cat tour one tiger — and only one — allowed touch through the bars in the form of a scratch / rub. Keepers would entice Kemiri up to a mesh gate where she would either walk back and forth rubbing herself on the wire, or sit leaning against it, at which time the keeper would invite visitors to approach, and gently touch the furred captive. These experiences of touch and up-close viewability with all the concomitant sounds, smells, and surrounds gave interactions an extra-ordinarily ‘authentic’ feel, just as the zoo promoted, “a unique experience.... a once in a lifetime experience.... up close and personal.... treasure for a lifetime!” (ZoosSA 2012b).

**“They are cheeky!”**

During my interview and behind-the-scenes journeying with Craig, I learnt that he too experienced being part of a larger system where ‘control’ over the whole is a fiction. As he moved through his keeping duties that day, I attempted to place myself spatially in relation to the outside setting of the *Tamarin House*. I surmised that this dilapidated workspace was inside the long brick wall that runs beside the back of the Pheasantry. This is the first enclosure *outside* that you see the Cotton Top Tamarins moving around. And, as I stood thinking this, there they were... the Cotton Tops, inside with us, where it was warm!

Image 65: Cotton Tops inside the *Tardis*



I posed a question to Craig that had been brought up by a few volunteers about these particular tamarins. "They used to be out and about, around the zoo café, didn't they?"

Yes. *They* are too bothersome and active for that. It would be better to let the Golden Lions [Golden Lion Tamarins] run free: they are more sedate. A Tasmanian Devil ate a Cotton Top.

I was gobsmacked at this announcement. All of the volunteer talk about these Cotton Top captives and their free-roaming through the zoo, had never elicited this information. "What? I thought they were re-enclosed because one of them dipped a finger in someone's coffee!" Craig smiled at my announcement, and said, "they might have done that too, they are cheeky!"



Image 66: A Cotton Top Tamarin feeding in outside exhibit.

Image 67: A Tasmanian Devil



So, one endangered species from *this* continent ate another endangered species from South America, *in* the zoo. This was a certain lack of control in stark evidence. Enough, I wondered, so as to manufacture a cover story? I asked volunteers about the past Cotton Top free-roaming again after this interview, but never met anyone with Craig's version,

which I took to be accurate. A couple of years later a curator retold Craig's narrative at a volunteer meeting, where it was the talk of the coffee and cake session that afternoon.

Craig and I, in talking about home and the state of this behind-the-scenes food preparation area, began to talk about zoo management. His summation of the administration included not liking the amount of questionable paperwork (an appraisal with which other keepers concurred), and the admin / management's seemingly general lack of experiential knowledge. He concluded with a judgment about the limitations of commercial management: "we have this marketing department and I wonder if they *ever* walk around the place."

Could it be that management and keepers are at different spacetime matters of zooing, a different recursive loop? Thinking about *in situ* living, it appeared that keepers thought *within* the system, whereas management was attempting control over *all* the systems. Craig wanted the gum to be like sap from marmoset-incised trees in the rainforests of South America. Management wanted to extract resources to keep the zoo viable. The keeper's scale of zooing aligns more with captive life now and management has the conscious purpose of western life today, that is, market-world, "a short-cut device to enable you to get quickly at what you want" (Bateson 1972, p. 439).

Craig's lunchtime was due, so our time together was up. I thanked him for taking me along on this impromptu behind-the-scenes session, and he went off to have lunch, after which he had a 'Primates Feed and Talk' on the boardwalk to deliver — another aspect of keeper zooing that some disliked and others embraced.

### **Other emotional responses**

Keepers, when interviewed, often disparaged the ritual of keeper-to-visitor captive narratives. These narratives occur in behind-the-scenes tours, or during out-front lunchtime talks. Many keepers articulated that they would feel more comfortable with no visitors at all and just a conservancy, caring zoo-space where the life forms under their care were their *only* responsibility. After being introduced to one keeper and admitting I did not recognise her from my one-year of volunteering and fieldwork, she told me, "it is my choice not to be seen. I like it back here, not out there with the public."



Another keeper, who self-classified herself as “still a learner here,” gave me her reaction to wielding a microphone in front of the captive’s exhibit and giving a talk to visitors.<sup>70</sup> “The last 5 years there has been a huge focus on things like animal encounters, and tours. I *hate* them. I don’t like getting up in front of people and talking.” I commented that there had been a crowd around during one talk that she gave that day, to which she responded:

Yeah. I had my back to them most of the time (she laughed as she told me this). We do public talks, so you have to get on a microphone and talk. I dread it. I hate it. It just takes up *so much* of my day that I would rather be doing something with, or for, the animal.... We used to breed [her captive species] here. There is no reason we can’t do that again.

This keeper seriously wished to breed the captives under her care, but had been disillusioned as to this possibility, due to the current financial climes and the zoo’s particular crisis around its debt (due to the Global Financial Crisis). Her longer-than-five years tenure was still self-perceived as in the ‘learning phase,’ yet she recognised the mismatch between management and keeper ethos.

Another job some keepers articulated disliking was ‘reports’ and one keeper, Joe, openly admitted to reconfiguring these temporally because, “there are ways to do e-reports, so they look like they were done at a certain time. The animals come first.” Various keepers echoed this comment, iterating that the job entails entanglements with numerous people and materials, but the primacy is, and should be, the captives. For example, Craig referred to an A4 printed sheet of paper, thumbtacked to the back of a kitchen door, during an interview. The A4 sheet held a list of captive’s enrichment articles, with unfilled spaces for the keeper to allot the captive’s responses to different pieces. Craig referred to this as an “impossible ask.” Ripping off the unfinished ‘audit’ request from the door he shook it and stated, “who has time for this?” As a captive enhancement procedure, the value was around the workload on the keepers versus where the finances were being prioritised. There were not enough workhours for Craig to fulfil this measuring process.

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<sup>70</sup> Keeper talks would happen at set times like ‘lunch’, or during school holidays at set times around the zoo. They were promoted at the front gate on a chalk board displaying the day’s events.

Barth (2002), in discussing audit culture as found in academe, argues the authentication of anthropological knowledge becomes quantifiable through bureaucratic determinants. He argues, similarly to Neils Bohr and Barad, that the “design of the measuring instrument defines what will be valued” (Barth 2002, p. 9). Craig, as part of the measuring apparatus was distinctly unimpressed with the requirements of quantitative measurements, especially as they impinged on the space time matter of captive / keeper relations.

What is being valued by these quantitative measures didn't necessarily differ from what Craig valued, but the onus was on his energy input, and this was already consumed with captive-care and the other bureaucracies the zoo imposed on keepers; public talks, behind-the-scenes tours (preparation for, and conduction of), and various reportages, just to name some of the areas keepers self-identified. In Craig's view, the loss of 'valuable' keeping time replaced by the imposition of questionable-value quantitative measurements seemed a waste of energies, zoo-resources and, thus, was a negative impact on captive well-being.

Audit pits western perceptions of nature against itself (Ehrenfeld 1978, p. 203). The well-being of living *ex situ* and, thus, requiring more knowledge about how to alleviate problems, is what enrichment — and the 'audit' processes around it — attempt to address.

(W)henever 'real' values are computed it becomes possible — even necessary — to rank the various parts of Nature for the unholy task of determining a *priority* of conservation. (Ehrenfeld 1978, p. 202 )

Ehrenfeld (1978) argues there are two problems in ranking reality in this way: in effect, we do not know all the systemic interconnections, and furthermore, more complexity equates with less knowledge about the system (pp. 202-4). “The second hazard is that formal ranking is likely to set Nature against Nature in an unacceptable and totally unnecessary way” (Ehrenfeld 1978, pp. 203-4).

Western humanism, as applied here, flaws keeping efforts. Keepers articulated dissatisfaction with the zoo, its management and in particular the values to which it adhered. They exhibited conflict between what they were being asked to perform as

zooing, and the zooing they wanted to perform. Keepers knuckled down and did the tasks, albeit with emotional articulations to me, and probably / possibly to fellow keepers. Craig questioned the wisdom of quantitative measuring that impinged on his spacetime mattering for captive care and the quality of management commitment. These discords, between the management 'system' and keeper zooing, emphasise alternate value systems that underlie the organisational principles being actioned. Making humans exceptional to the rest of earth's life forms altered the possibilities for supporting the rest of earth's life forms. Exceptionalism, in its many manifestations, exhibits patterns of behaviour — redundancy — as do most emergences according to Bateson, where, "the potentiality for order and pattern is immanent throughout this world" (1972, p. 344).

### **Patterns of exceptionalism**

One pattern of exceptionalism, that I argue also applies at the zoo, is examined by Oppenheimer (2018). In a book review of *White Folks*, authored by Timothy Lensmire (2017), Oppenheimer (2018) is triggered to revisit his own, earlier, public relations work at a USA university. In this academic position Oppenheimer was anxious about the tensions around the ideal of dismantling white "power and privilege" on campus with the reality of the political situation where, "the university's continued viability in a conservative state depended on keeping most of the alumni happy, and carefully picking our battles" (Oppenheimer 2018, s9/14). Prevailing white-power politics diminished the possibilities for university-led action to fight racial exceptionalism. What was not expected were the limitations of the expressions used to tackle the inequality problem.

Oppenheimer (2018) contends that the language used in addressing dominant discourses — the linguistics employed — created a release valve for the academics tasked with addressing this problem on campus. The academics avoided the actual domineering structures of battling oppression, and therefore the political outcomes, by opting for:

...low-proof language like "diversity," "inclusion," "access" and "excellence" — words which, in their generality and vagueness, corresponded much more closely to the menu of good but marginal work we were actually doing. ... [and which] seemed to discharge a kind of confessional duty. (Oppenheimer 2018, s 9/14)

He is suggesting that wording a particular perspective, in this instance, “the theories and vocabulary of privilege discourse” (Oppenheimer 2018, s9/14), in a *particular* way, had a double benefit. The first benefit originated through releasing the tensions involved in the contradictions inherent in the subject being tackled (for the would-be tackler) and, secondly, that in not actually battling the power structures responsible for the inequality, the powerful and their structures remain unperturbed (Oppenheimer 2018, s9/14). According to Oppenheimer, Lensmire (2017) asks penetrating questions about white self-knowledge, questions that are not part of the usual academic repertoire. In benefit of entangling his and *White Folks* theories Oppenheimer (2018) is left asking usually unasked questions. “Have we fully disentangled our strategies for making egalitarian demands from our own needs for consolation and absolution?” (Oppenheimer 2018 s10/14).

For Lensmire (2017) and Oppenheimer (2018), this is a form of shoring up the tenuousness of white privilege that keeps what matters (what is being valued) within normatively acceptable bounds. They surmise that people and communities seek solace and support about their “internal conflict” (7/14). That is, *consolation and absolution* is required in spaces where people struggle with the contradictions and subsequent paradoxes afforded by their lives. Paradoxes that manifest in everyday work / home / social relationships, because the dissonance of treatment meted out to Other has to be made palatable. At the zoo, this dissonance between what zooing said it valued, compared to what was actually being valued, could be aired to peers.

Volunteers, for instance, comprehend the strictures and contradictions keepers perform under, with one fellow guide succinctly stating that keepers were, “hamstrung by bureaucracy on *every single turn*. And you couldn’t have an original thought because it would be mallet-ted immediately.” Conservation brought forth a litany of complaints from volunteers about the zoo, where the stated aims came under unembellished scrutiny.

Only exhibiting female giraffes; exhibiting a kookaburra that lives all alone; a lion that has been castrated; and two tigers that like each other but they want the other female tiger to breed with, because of genetics. And the same with the Orangs! How is that for conservation?

If people who work at the zoo (paid and unpaid) perceive the organisation as not achieving stated ideals — the ideals the zoo say they exist to accomplish — could this be why staff often judge the narratives and rituals of the zoo as unproductive? Even, or especially, the ones they are tasked to perform? Is it that keeper’s particular presentations to visitors, or the ‘audit culture’ of quantification measures they are tasked to perform, are deemed unproductive, because the wordings / quantifications they are asked to use, do not fully address the inequalities or ranks western culture imposes? And when workers do *not* challenge these structures, wordings and quantifications, are they then reproducing them, as Oppenheimer (2018) feels about his attempts to address his university’s white ‘power and privilege?’ Does the slight / light “marginal” work *actually* being done buttress the very injustice it was meant to address? Bateson argues this does occur, that the ways we visualise reality, are entangled *with that reality*. This is, “the self-validating power of ideas: that the world partly becomes — comes to be — how it is imagined” (Bateson 2002, p. 193).

Keepers and volunteers *want* to believe that their work is aiding in the survival, well-being and maintenance of earth Others. However, the reality of zoo management’s western value system interrupts and dissuades them in this belief because the bottom line of *finances* trumps the stated values of zooing. A volunteer offered this assessment between the ideal and real values on offer. “I mean you can look after the animals you are responsible for, but ultimately you can’t make any decisions yourself because it is all centred around the dollar sign.” The question then becomes, is good keeping dealing with the paying public, doing audit chores, and, in general staying within the politics of western values? Or is this “good but marginal” [keeping] work? What then of the ideal fiction of a zoo as being a “*conservation society that exists to save animals from extinction*” (ZoosSA 2012d, p. 7).

Keepers spoke about desiring more time to care for captives and for a quiet, visitor-free place in which to perform these duties. If this were the case, and the zoo focused upon husbanding and conserving earth Others without selling admission to anyone, their captive’s role of ‘resource’ would be removed, and hence the role of ‘extractor of resources’ (for keepers) would also be removed / cancelled. Is *saying* this a release valve for keepers from the contradiction of lesser-ranked life forms’ captivity? And, in

imagining this as the only course of action, does zooing self-validate the idea of western culture as humanist control and progressive time?

What we presuppose to be ‘real’ matters, because our presupposing sets up the structures for what follows (Bateson 1972, Ehrenfeld 1978). Having presupposed ourselves exceptional to all Other matter led us to ranking and dealing with Other life forms in the multitudinous ways we do. Zooing is one such example of ‘ranking and dealing’ with Other life. I argue that representations about conservation and zooing create paradoxes for the people who perform the keeping work, and therefore, to ameliorate contradictory, paradoxical experiences, keepers articulate marginally actionable narratives. Is this the current problematic of political correctness? When we pre-suppose that we are compartmentally-separate from nature, the rest of the separations follow, including us from the outcomes of our spent energies. Except, of course, that we know how we made only marginal efforts and how the structures of privilege and power remain. Lensmire’s (2017) USA hometown populace ‘hoped’ their offspring would tackle the race problem better: Oppenheimer remained ambivalent about this hope (Oppenheimer 2018). I think, possibly, that keepers are ambivalent about tackling their particular ranking problem, too.

### **Conclusion**

Zooing recursively makes captives, while captivity re/makes zoo. This circuit structure is an eco-nesting within western cultural becomings. The becomings, however, are often shortcomings when applied to Other life forms held in captivity because, culturally, we westerners do not recognise the need for holistic comprehension, and, therefore, our applied, conscious purpose, means impaired outcomes.

It is the keepers (and some volunteers) who ponder on these outcomes and wonder at the processes at work in producing them. Keepers assess the values being actioned, against what they feel and do in their work, and thus, what they value about it. The simple narrative of Chook demonstrates how the circuits recur, and thus blur the categories he ‘represents.’ But of note here, and not mentioned there — because to do so would muddy the clarity — was that by being ‘hand-raised’ (as opposed to feather-raised, I suppose), Chook never reproduced because he only courtship-displayed to keepers. One keeper told me that *every animal has the right to breed*. Captivity’s circuit structure of multi-

complexness where separation, enclosure, enclosure-design, build materials, access to 'suitable' (human chosen) mates, being hand raised, and a multitude of other matters, all pertain here. As does, the default value held by westerns of economics, which also circuit back — recursively loop — into all of the above. So, if captivity itself can prevent the right to breed from emerging, *how* is this right going to emerge?

Also, the discontents about keeping articulated to me focused upon the lack of agency — Bateson's "effective voice" (1972, p. 146) — keepers felt in dealing with management. I interpreted their dissonance as a parting of the ways in the values being asserted by the ranks above them. The lack of agency ran deep, because keeper options were limited to altering keeper lives, not to altering captive lives. Obvious to me was that keepers enjoyed working with / for captives, and obvious too, was visitor appreciation of behind-the-scene tours, public talks, and personal experiences with keepers and captives. What was absent was how such connection was limited by the matter/s of behind-the-scene states of disrepair and negative feelings about doing these jobs. It was not neglect by keepers' though, but the default situation due to decisions of where finances, and keepers' energies, would be channelled. I interpreted these as immanent understandings of working with nature, as compared to the default line of working to control nature (Harries Jones 2004, 2005, 2008). And posited that articulating these might provide keepers with a release-valve affect (Oppenheimer 2018).

Finally, the zoo is riddled with the dualisms that undermine western attempts to realign our species ecologically. As a western organisation the zoo manages nature as a resource, but keepers' resistance to the imposition of values that they deemed less than their own still emerged because the conscious purpose of resource management does not complement the wisdom of keeping. That is, keepers understated but demonstrated values did not adhere to the 'conscious purpose' only, of zooing. Keepers' values entangled practices of 'wise' keeping. Working with captives rather than controlling / managing them, beautifully demonstrated holism.

In the final chapter I give a summary of the four key theorists perspectives, as they altered my fieldwork understandings. I also utilise their insights to access *my* 'scale' of zoo matter/s.

*Weighing up and Winding down*

Some of them were angry  
At the way the earth was abused  
By the men who learned how to forge her beauty into power  
And they struggled to protect her from them  
Only to be confused  
By the magnitude of her fury in the final hour.  
(Browne 1974)

**Weighing up**

As I noted in the Prologue, humans helping pelicans to survive is deemed and narrated by the zoo as progress — or more concisely — as human progress. This occurs, while the vast energies shown by pelicans in their own survival is merely ‘interesting’: as was the geologic and biospheric formations that attended them. I had wondered how this unequal allotting of agency emerged, and eventually came to view it as a ranking system, that is, a hierarchy. Moreover, a hierarchy, which is not under scrutiny.

In this Age of Ironies this must be the greatest irony of all: humanism, which proclaims and celebrates the critical intelligence of humanity, has in the last analysis failed to invoke it where it is needed most, to test humanism’s own faith by appraising the success of our interaction with our environment. (Ehrenfeld 1978, p. 19)

In the zoo, where assertions of conservation, education, and connection to nature abound, humanism remains the cultural norm. That is, the problems of diminishing species, loss of habitats and human separation from nature are addressed, but what is utilised to address them is non-appraised humanism and its control and progress narratives. Hence, the pelicans are good narrative fodder when volunteers ‘educate’ visitors about progress narratives around less pelican siblicide, and Australian Pelicans are a great zoo representative rank, being, “big, ...pretty, and ... easy to see” (Osborne 2013), yet pelican and Other matter/s agency remains a lacuna. This insight, about rankings and the



human metrics that produce them, propelled my reading and writing because I wanted to do as Ehrenfeld suggested and appraise the success of human-captive relationships — “our interaction with our environment” — which became my journey into articulating humanism to humanists.

Collinwood (1940), and the presuppositions that are always embedded in our questions and statements became foundational. Ehrenfeld (1978) and Bateson (1972), boosted this insight through showing how the presumptions of western humanism entail the outcome of human exceptionalism and its concomitant dualistic thinking *and* ranking system. Plumwood (1993) expanded on this, arguing feminists should widen their investigations into western rankings. Rather than feminism challenging just the patriarchy, she argued for research into the “complex cultural identity of the master formed in the context of class, race, species and gender domination” (Plumwood 1993, p. 5). I utilised her five mechanisms to appraise the zoo’s practices and processes, which continue to generate Cartesian dualistic separations of meaning, and a normative complexity, with deep, cultural entanglements. These entanglements are both flexible and change resistant, but the master narration organises itself as the dominant position, *always*.

In Australia, the colonialist hierarchy that benefited from this master narrative is discussed in *Fieldwork amongst the captives* and *Zoo history*. In chapter four, I utilise the five mechanisms Plumwood (1993) develops to observe the *big, pretty, and easy to see* Giant Pandas at the zoo. Moreover, these insights into the reductive normativity of western humanism, meant researching my own culture’s taken-for-granted assumptions, as applied in a zoo. Posthumanism emerged as a relational, connective presumption about how reality becomes, or how the universe works. From this perspective, the values being implemented at the zoo required investigation. The official zoo narrative situated humans-at-the-zoo seeking to better the lot of earth Others *whilst also* bettering the lot of humans. That is, coterminously saving life forms from extinction, *whilst* educating and connecting humans with these earth Others. For the bears at the zoo, past and present, this meant / means a life in captivity. Only the representative narratives altered, to situate the captivity in different contexts, as shown in chapters four and six.

I discussed how, in the past, captivity of exotic earth Others demonstrated empire's attempts to dominate — and to be seen to dominate — the 'natural' world, while today this has morphed into science's attempts to comprehend-command this same 'natural-world' space. This was analysed in chapter four, with artificial insemination, and in chapter six, with eco thinking and the spectacularism of science. Western compartmentalisation, as the fluidity of utilising separate representations, is highlighted throughout the thesis. For example, in chapters four and six where stasis is required of the captives, and therefore, Giant Pandas must remain bamboo eating, possible breeders, no matter what they actually consume, whether they actually reproduce, or even mate. In this thesis, representationalism has been underscored as a mechanism of domination in systemic rankings. In chapter four and six, for instance, I examined the multitudinous representations of pandas; in chapter five, the wayfare from tiger to lion enclosures on behind-the-scenes tours included the experience of backstage-best-practice representations, to 100-year-old builds that defy progress narratives. Finally, in chapter seven, I explored representationalism through the contradictions of keeping.

However, there are also break outs from this stasis, where life forms — human and Other — do not accept the domination and reject the narrow “inversion” of humanist categories (Ingold 2011a, p. 117). The builds at the zoo can be seen as human non-control in chapter five, the *Immersion Hub*, while sometimes the husbandry of species proves troublesome (out of control?), as in chapter seven and the King of Squirrel Monkeys. Other-times, it is humans who question narratives, as discussed in chapter five in reference to Cassie the cassowary, or they perform zooing differently as shown in chapter seven, with *Gum Arabic*.

To perform zooing alternately highlights a major understanding developed within the thesis; the tension between the representation/s of zooing and the experienced life emergences of zooing. In chapter seven, I examined different values of zooing: those being 'promoted' by management, and those by keepers who, I argue, envision a more holistic home-habitat-life for their captives. However, for keepers, where this is not possible, other tensions emerge such as marginal work in chapter seven. So, too, zooing creates emergences not usually on a western spectrum of experience, as volunteers use “ideophones...that sonically defines...alignment with the nonhuman world” (Nuckolls

2004, p. 72), as discussed in chapter five. These alternate becomings, however, emerge within a western cultural narrative that inevitably defaults to an *economic* value (Gleeson-White 2011, 2014, Waring 1988). These tensions between alternate value emergences — economic and holistic — where “holism” (Bateson & Bateson 2005, p. 181) as “systemic wisdom” emerges in workers (paid and unpaid) at the zoo, denotes another break out, one that challenges the “greedy and unwise” western, economic-only, value system (Bateson 1972, p. 440).

Implications of these emergences for earth Others are detailed in the thesis. For example, Chook the Superb Lyrebird, Tamarins and Marmosets in chapter seven, Polar Bears and Tapirs in chapter four, Lions in chapter five, and a Flamingo, Sea Lions, and a particular Giraffe called Marius in chapter three. However, these last two ‘captives’ were positioned by the Board President, and the CEO of Zoos SA respectively, as requiring *more* matter into the matter/s under consideration than is usually espoused under the rubric of economic rationalism. The president and CEO *acknowledged*, albeit in alternate ways, the restrictions of zooing. The need to broaden the scope of matter/s — and the agency therein, as all matter has agency, or “agential realism” (Barad 2007, p. 225) — means accepting human non-exceptionalism *and* acknowledging other matter/s agency; and at some point *applying* that knowledge to human manipulations of matter/s.

This understanding, promulgated throughout the thesis, adds to the growing awareness, and resultant literature, about western humans’ *miscalculation* about earth Others, and earth Other matter/s in general. Human geographers, philosophers, educators, and historians, as well as anthropologists, are included in this emergent awareness. This thesis also underscores the *misapplication* of our interventions into Other matter/s becomings and attendant, dangerous, unknown recursivity.

I have argued that the various zooing performed during my fieldwork oscillates around economic values of western humanism and a wisdom in comprehending more entangled lived experiences. These becomings highlight the relationships and connectivity of our culture, even as it is swamped by the inevitable, unshakeable, totality of compartmentalising dualistic separations and the current western metric of economic-only rational reasoning. On this point, Bateson is emphatic:

If we continue to operate in terms of a Cartesian dualism of mind versus matter, we shall probably also continue to see the world in terms of God versus man; elite versus people; chosen race versus others; nation versus nation; and man versus environment. It is doubtful whether a species having *both* an advanced technology *and* this strange way of looking at its world can endure. (Bateson 1972, p. 337, Original emphasis)

I had initially struggled to comprehend Bateson (1972), and then realised his holism entangled with what I had been writing about in the other data chapters. Dualism segregates western ‘conscious purposes’ of market-world from their entangled becomings. We manipulate matter/s to our conscious purposes, but our representations unhook us from the resultant recursivity — we do not ‘count’ the biosphere, the planet, the universe in our economic metrics *at all* (Gleeson-White 2011, 2014, Waring 1988). I came to perceive that Plumwood (1993) explained the mechanisms of conscious purpose as applied to recursive loops. For example, the Giant Pandas kept becoming — zapped fig-eaters and non-breeding breeders — but the multi-representations kept coming too. Holistically, Ingold (2000, 2011) understood that movement — wayfaring for him — is, at base, how the universe emerges, and that attempting to hold *anything* still is a one-scale answer to entanglement at many spacetime-matter scales of becoming. Inhabiting the zoo is to experience it sensorially, where the beauty and rationality of zooing emerges in the skill of keepers, and in the pleasure of volunteers and visitors, as discussed in chapters five and seven. Finally, Barad (2007) echoed Bateson’s (1972) recursivity loop-back effect at different scales. She perceives reality through complex, multi-level relationality, where: “Posthumanism.... is not held captive to the distance scale of the human but rather is attentive to the practices by which scale is produced” (Barad 2007, p. 136). Further, *absenting* matter/s, through numerous different representations that allows earth Others to be scaled to fit different humanist categories, doesn’t lessen the impact of their entanglement, it just confuses the linearity we — wrongly — presume is the norm, and creates Bateson’s contradictions / paradoxes. Human manipulations of matter are a dangerous venture if we absent Bateson’s (1972) wisdom and recursivity across spacetime-matter. In this sense, scale matters.

## Winding Down

The utopian fiction of our culture is our exceptionalism and our control over all our manipulations of matter/s. We have, indeed, learned to *forge earth's beauty into power*, but, as my key theorists understood, being able to forge is not the same as being able to manage all the consequences of that forging manipulation...hence, “the fury of the final hour” (Browne 1974).

Humanism, the normative western belief of our era, has got us to this point in time. I set out to look for the zoo's humanism, and I found it. How could I not, as the zoo is part of normative western thinking and works within its parameters. In this thesis I have detailed the humanism of zooing processes and practices. Doing this revealed where more responsive, relational, practices and processes emerged. That is, illuminating humanism to myself — a western-humanist-researcher — clarified zooing ambiguities / paradoxes and emergent relational becomings. I concur with Ehrenfeld who bluntly argues that, the “rejection of humanism...is now long overdue” (1978, p. 223). We must presume a different presupposition to extract ourselves from humanism's outcomes. This is why presupposing a relational universe, where we are matter like all else, begins a different *posthumanist-journey*, as it is a theory that better explains our current becoming.

Barad argues “(t)heories are living and breathing reconfigurings of the world” (2011, p. 451). Posthumanism acknowledges Australian Pelican agency, even though we don't know much about the *how* of their agency, nor the extent. Yet, as a theory, posthumanism reconfigures pelicans and all Other matter/s realistically, that is, as agentic matter/s. If there is one take away from my research, it is that an *accountability* of western humanist energies — fragmented and compartmentalised out from the rest of matter/s and limited to the economic — is not enough to replace *responsibility* that becomes within all else that exists, that is, what westerns refer to as nature. At the zoo, westerns demonstrated, through their expended, experienced energies, a responsiveness *with* captives. As my key theorists illuminated, in the responsibility of relationships, a clearer understanding of our reality emerges.

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