Thom van Dooren & Deborah Bird Rose

Storied-places in a multispecies city

> All that is unhuman is not un-kind, outside kinship, outside the order of signification, excluded from trading in signs and wonders. — Haraway, *Modest_Witness@Second_Millenium*

> Recognising earth others as fellow agents and narrative subjects is crucial for all ethical, collaborative, communicative and mutualistic projects, as well as for place sensitivity. — Plumwood, *Environmental Culture*

Introduction. Over fifty per cent of the world's human population now lives in cities, and the rate is increasing exponentially. At the same time that humans are making their way to cities, or finding their rural homes overtaken by urban development, many other animals are also making the shift to urban life. For them also, the reasons for urbanization, while complex, include the same two major constellations of causes: animals are choosing to move into city spaces, and animals are finding their homes overtaken by cities. Meanwhile, a growing interest in "biodiversity" and "urban nature" has made us aware like never before of the many animals that reside in our cities — some newly arrived, others pre-dating the city itself.

To draw attention to animals in city spaces is, in itself, nothing new. As Hilda Kean reminds us, "Non-human animals have long been recognized as inhabitants of the metropolis" (54). In this paper, however, our focus is on the specific ways in which some animals make their homes in urban places. Focusing on a small colony of penguins and a flying fox camp, both located in Sydney, Australia, we are interested in exploring how these animals understand and render meaningful the places they inhabit. Our thinking here is rooted in a notion of places as relationally constituted: that is, an understanding in which animals, sites, and stories all shape, and are shaped by, entangled and circulating patterns of intra-action.[1]

In contrast to some previous work on narrative and place that has focused exclusively on humans, in this paper we are concerned to ask: What might it mean to take storied-places seriously as multispecies achievements? In situating this discussion in urban environments, we highlight the value of an attentiveness to nonhuman storying of places: namely, its ability to provide new perspectives on the world, and in so doing to

draw us into deeper and more demanding accountabilities for nonhuman others. Our accounts of penguins and flying foxes work to disrupt both the singularity of human-centrism and dualistic notions of animals "out of place" in cities. The alternative ways of knowing and interacting with urban places offered by penguins and flying foxes have the potential to open up possibilities for a more equitable multispecies city, a task that is particularly important for those species that are in some way tied or drawn to specific city places, and perhaps especially, in these perilous times, for those whose future is endangered.

To this end, this paper makes an argument for an ethics of conviviality that is urban-based, emplaced, embodied, and enlivened through multiple stories enacted and expressed by multiple species. Places are materialized as historical and meaningful, and no place is produced by a singular vision of how it is or might be. In short, places are co-constituted in processes of overlapping and entangled "storying" in which different participants may have very different ideas about where we have come from and where we are going. What would it mean, in a multispecies context, to negotiate "across and among difference the implacable spatial fact of shared turf" (Massey 3)? What would it mean to really share a place?

Part I: Storied-places in animal worlds. A great deal of recent work in human geography, anthropology, and philosophy has emphasized the more-than-material dimensions of "place" — albeit with a focus on human relationships with place. The great philosopher of place Edward Casey has been at the forefront of this scholarship, and has documented in his work the history of western modernity's lack of interest in theory and philosophy of place, as well as the more recent reinvigoration of place.[2] Central to Casey's analysis is the fact that a living being is emplaced through its body: that places are formed between bodies and the terrains they inhabit. Within this nexus of body and terrain, specific places become sites of meaning. In addition, what has emerged from the work of Casey and others is an insistence on the more than "physical" nature of place: "A place is not a mere patch of ground, a bare stretch of earth, a sedentary set of stones" (Casey, "How to Get" 26). Instead, these theorists have pointed to the embodied, situated, kinetic and narratival nature of place — highlighting the way in which places are understood and embedded in broader histories and systems of meaning.[3] But stories and meanings are not just layered over a pre-existing landscape. Instead, stories emerge from and impact upon the way in which places come to be — the material and the discursive are all mixed up in the making of places, as with worlds more generally.[4]

If we accept this notion of place, however, an important question remains before us, namely, who stories (in the active voice) these places? Whose stories come to matter in the emergence of a place? In particular, we are concerned to ask: What might it mean to take storied-places seriously as multispecies achievements? More concretely, what would it mean to take seriously the way in which some specific animals story their specific places?

The early twentieth century Estonian biologist Jakob von Uexküll offers us perhaps the first systematic way into the these kinds of questions. His concept of an organism's Umwelt — the recursive perceptual life-world that characterizes organism and surrounds — has profoundly influenced several generations of thinkers (as carefully documented in a recent, and extremely rich, study by Buchanan). Uexküll proposed to investigate how environments are meaningful to animals — how the "life story" of an animal develops according to its own perceptions and actions. Not content to view animals as objects, Uexküll proposed a much stronger view of emplaced, embodied animals with a subjective experience of the world (Buchanan 2). Buchanan argues that Uexküll's great achievement was to produce an intersubjective account of nature (28). Contemporary research within fields of ethology, philosophy, STS, biosemiotics and multispecies ethnography are developing this wave of thought.[5]

Our thinking draws on this exciting and growing body of research, directing it toward a particular focus on story, and its intra-actions with place. In this context, we are working with a broad notion of "story": a story is that which emerges out of an ability to engage with happenings in the world as sequential and meaningful events. William Cronon has drawn an instructive distinction here between "narrative" and "chronology", and while his analytic focus is on humans, his distinction is broadly applicable across many life forms.[6] Chronology, Cronon asserts, is a telling of events that simply places them in chronological order. In contrast, narrative, or story, renders meaningful those events in relation to each other and to the wider context of their occurrence. We will set aside for the moment the question of what might be involved in telling a narrative, whilst focusing on an enlarged understanding of narrative itself. For if a multispecies approach to storied-places is to have credibility, we must consider the question: are animals narratival subjects in their own right?

The work of Paul Shepard offers us an avenue into understanding the way in which many nonhuman animals render their experiences and perceptions in the manner formulated by Cronon, that is, as successive and meaningful events. Shepard draws on the concept of time-binding, as discussed by Loren Eisley in particular. Time-binding is

the process that connects one event to another, into a sequence with meaning. Shepard offers the example of the story-making through which an animal weaves sounds, smells or other experiences into a meaningful sequence so as to, for example, determine if a predator is drawing nearer or farther away, and on this basis make life or death decisions about what to do (Shepard 16). Other examples abound, and our case studies will take up the analysis in relation to specifics. For now it is sufficient to state that that which bridges the gap between one event and another (indeed, that which defines one event as different from another and thus actually constructs it as a unit) in a way that produces meaning is narrative. In this sense narrative is a quality of the lives of many (probably most) nonhuman animals (Crist, *Images of Animals* 170-1).

Our intention here is to point to a kind of minimal storying that will subtend our exploration of the specificities and possibilities of the storied worlds in which many animals dwell. What interests us is the fact that the experiences of many nonhuman animals are rendered meaningful by them in a way that might be recognized and thought about through the familiar lens of "narrative." Most particularly, we are interested in applying this account of storying to our understanding of some animals' engagements with places. As such, our analysis is set within time, and stories are both individual and inter-generational, with the effect that stories are both generated and received. It is worth recalling that to be set within time is not necessarily to be harnessed to western concepts of linear time. The significance of narrative is in the meaning-making that connects the lives of living beings to the worlds they inhabit. The stories we examine are set within irreversible time in the sense that they are transmitted across generations, but they involve returns, recursions and innovations as well as linearities.

The analysis we offer explicitly rejects the idea that narrative is an anthropocentric "proper," that is, another of the many attributes carefully defined and (mis)identified in the ongoing effort to locate a capacity unique to the human that can do the work of holding us apart from the rest of the animals.[7] At the core of our thinking about multispecies storying is the willingness to recognize storied-experience in nonhuman places — to accept nonhumans as "narrative subjects" (Plumwood 175) with their own abilities to trade in "signs and wonders" (Haraway, *Modest_Witnes*s 8). The ability to construct a storied experience of the world (as we have described above), and so to interact with places (and a world more generally) as personally significant and meaningful, does not require the capacity to tell that story to another (in whatever fashion), although it may include that.

While this is a mode of engaging with the world that is probably shared — in various forms — by a wide range of animals, the storied-engagement with place outlined in this paper should be understood as just one general way in which nonhumans might develop place-attachments, and so just one set of the many possible ways in which nonhumans might make an ethical claim on us in relation to a place. The nonhuman weavers of the stories we outline below possess various cognitive, social, and experiential capacities. Taking up this focus is part of an effort to "thicken" these nonhuman subjects, to begin to give fuller accounts of the specific ways that little penguins and flying foxes make themselves at home in specific places within the greater city of Sydney. Rendering these relationships intelligible is a core prerequisite for the kind of conviviality, the ethics of sharing places, that we will propose in the final section of this paper.

While we potentially leave ourselves open to the charge of anthropomorphism in the use of this language and indeed this lens through which to view the world, we take these charges to be ill founded. As the accounts of penguins and flying foxes offered below make abundantly clear, the capacity to experience places as meaningful and significant is one that is shared well beyond the human species. Eileen Crist's work on anthropomorphism in animal minds leads her to assert that there is no neutral language for describing animal behavior/mind; and the absence of the continuities that are labelled "anthropomorphism" by some scholars all too often reinforces an entrenched "mechanomorphism" that simply obviates or negates animal mind (Crist, *Images of Animals* 121-22). This context requires us to develop a language that is capable of prompting recognition of similarity and responsibility, between embodied, social creatures. "Storied-places" and an ethics of conviviality provide one such language.

An analysis that links story, place, and the more-than-human world confronts several fascinating questions: how would we (humans) know that an animal is enmeshed in a storied-place and is participating in, shaping, and being shaped by that story? Our path into this issue looks at narrative as action. Where do animals go, and what do they do? We are proposing that in many cases their actions articulate a narrative of place and thus indicate the construction/inhabitation of a storied world.

Part II: Penguins. Just inside the mouth of one of Australia's busiest harbors, Sydney Harbour, on a headland that is on one side lapped by the calm waters of the harbor and on the other by the waves of the Pacific Ocean, lives a tiny colony of penguins. They are Little Penguins — in size and name — *Eudyptula minor*, meaning "good little diver." These penguins are members of the world's smallest penguin species: standing 30cm

tall and weighing around 1kg. Like all penguins, the members of this colony have a strange relationship with the land. Since their distant ancestors abandoned the skies for a life beneath the waves, they have become increasingly awkward and vulnerable out of the water. And yet, they are unable to completely give up their tie to dry land. Perhaps if they had been marine mammals they would have evolved internal gestation, "the key to the totally aquatic existence of cetaceans and dugongs" (Davis and Renner 88). But as birds, as egg layers, they need the land to reproduce. Perhaps if they had been marine reptiles, they would have been able to come up onto the beach in a single night, deposit their eggs — like the sea turtles — and then disappear back into the ocean. But as birds, penguins are "homotherms," and so "their eggs must be kept warm for development to take place" (Davis and Renner 88). And so it is this unique biology — a bird that lives under the water — that has given rise to penguins' special relationship with the land; or more accurately, their relationships with the very few specific places that they come ashore each year to reproduce. For these are specific places; not at all interchangeable, carrying the past experiences of individuals and the generations before them.

Photo by M. Kuhn

The breeding area of the Manly colony is one such place. But in addition to its penguin residents, it is a place inhabited and shaped by a large number of humans and other species. Since the mid 19th century, not too long after European settlement of the

(human) colony of New South Wales (NSW), this area has been a central site for beach recreation for the residents of Australia's largest city. Initially accessed by ferry, the seaside destination boasted that it was "seven miles from Sydney, and a thousand miles from care."[8] Now, over a century later, Manly has been well and truly subsumed within the ever expanding limits of the greater city of Sydney. As one of Sydney's most iconic beaches, the number of human visitors and residents in Manly have steadily increased over the past several decades. Highly sought after coastal and harbor front properties have led to increasing densities of residential development and one of the fastest rates of population growth in the state (ABS). While some of the land used for nesting by the Manly penguin colony is located along the coastline of a small National Park, most penguins breed on land that is now either public or located alongside residential properties (O'Neill 2).

The history of the penguin colony at Manly is not well known. There is documentary evidence for its existence since the early twentieth century, but it is widely thought to be much older. Over the years, perhaps centuries or longer, these penguins have adapted their breeding behavior to the unique local environment — in the absence of tussock grass and sandy soils, which in other places penguins would dig burrows into, members of this colony located in sandstone country, have primarily utilized rock crevices for their burrows (Bourne and Klomp 131). Since European settlement, members of the colony have been required to again adapt their breeding behaviour, this time to make use of as well as gain protection from, a changing urban environment. Manly penguins are sometimes now to be found nesting in the dark and dry places underneath houses, sheds, boats and more. As Bourne and Klomp note; "These modifications to their nesting behaviour have enabled Little Penguins to persist in the densely urbanised environment of Sydney Harbour" (Bourne and Klomp 131). But, while these penguins have found a way to co-habit with people, it has not been without significant cost. Manly is now the only spot in a harbor once rich with penguin colonies, where survival has been possible — and likely in greatly diminished numbers.

While other colonies of penguins once nested all along the south east coast of Australia and at several other places in and around Sydney Harbour, this tiny colony of around 60 breeding pairs is now thought to be the last on the NSW mainland. Over the past hundred or so years, all of the other colonies have disappeared. As the last mainland colony in the state, in 1997 the Manly penguins were declared an "endangered population" under the *NSW Threatened Species Conservation Act* 1995. Despite its protected status, this colony continues to face a range of obstacles to its survival; in particular, the loss of habitat through ongoing development, increased disturbance by

people (including noise, light and entanglement in fishing lines), and predation by several species, perhaps most importantly domestic dogs, but also foxes, cats and others (van Dooren).

In light of all these threats, the continued presence of penguins might make little sense to people: year after year they return to a place that is each time more built up, more noisy, more dangerous than the previous year. And yet, if you place an obstacle in a penguin's path — between it and its burrow — it will push and manoeuvre with astonishingly unfaltering determination to return to its breeding place. Quite simply, this is because, from a penguin's perspective, one burrow is not just as good as any other. From the beginning, penguins are connected to their place of hatching. Little penguins are philopatric, a term that literally means "love of one's home," and in biology describes a process in which an animal returns to its place of birth or hatching to themselves reproduce. It is not clear how, or precisely when, this attachment to a natal place develops. For roughly the past half century, curious biologists have moved seabird hatchlings of different ages between colonies to see where they would return to. What seems to have emerged from all this geographical disturbance is that philopatric attachment develops at some point between hatching and fledging.[9] Chris Challies' work in New Zealand indicates that for little penguins, translocation has to occur prior to 55 days of life for the new location to be treated as "home" (Gummer 26).

However it develops, this strong philopatry means that roughly two to three years after fledging — once they have reached sexual maturity — most surviving little penguins will find their way back to their natal place to breed for the first time. While a very few individuals do opt to breed in a colony other than the one in which they were hatched, once they have bred in a place for the first time — irrespective of whether they were hatched there — penguins have a very high degree of fidelity to that place (called "site fidelity"). Interestingly, this fidelity is often very spatially specific, with penguins not only returning to the same general area, but usually to the exact same nest or burrow each year. But this nest fidelity is not absolute. Several of the studies that have explored little penguin fidelity in detail — in colonies in Australia and New Zealand — have found that birds are significantly more likely to change nests if they were unsuccessful in their previous breeding attempt (Reilly and Cullen 81; Johannesen, Perriman and Steen 245; Bull).[10] Various explanations have been offered for this site fidelity, including the fact that it may enable birds to retain high-quality nests, and ones with which they are familiar. It may also minimize the time required to prepare a nest/burrow, and increase a penguin's chances of reunion with a past mate — in addition to site fidelity, little penguins also display fidelity to their breeding partners, perhaps especially partners with whom they have bred successfully in the past.[11] These explanations for

fidelity are often interpreted through the lens of the notion of "competitive advantage" that is at the heart of sociobiology (Crist, *Images of Animals* 123-65). More specifically, the advantages conferred by site fidelity are thought to improve penguins' breeding success. While this may well be the case, we should be careful about allowing these evolutionary explanations to become exhaustive accounts of animal behavior. Doing so commits the error of mistaking *function* for *motivation* (de Waal 280), and, even more problematically, it does so in a way that all too often negates or obviates richer notions of nonhuman cognitive life.[12] In short, all of the practical advantages of fidelity — which make good evolutionary sense — tell us practically nothing about how the imperative to be reunited with a place or a partner is experienced by individuals and comes to animate their understandings, actions and relationships.

Ultimately, wherever they go to breed, for little penguins the presence of a colony is all important. As with many other seabirds, is seems that little penguins will not nest in a place where other birds of the same species (conspecifics) are not present. In this context, the sight and sound of other birds seems to play an important role in penguins coming ashore — in fact, even after establishing nests in an area, penguins will usually gather in a group out to sea (called a "raft") and come in to the beach as a group. If juvenile birds return to their natal place to find it abandoned, it is unlikely that they will attempt to breed there.

These comments point to a general pattern of terrestrial behavior for little penguins. While there is certainly a great deal of *individual* variability in breeding and site fidelity that should not be forgotten in the search for species specific generalities,[13] it seems fair to say that penguin relationships with breeding places like Manly are the result of complex interactions between inherited and learned behaviours and ideas. While we cannot claim to really understand the full significance of these places from a penguin's perspective, it seems that a variety of factors influence these relationships: initially there is a pull to return to a natal site, that is then influenced by some specific changes in the site — in particular with reference to other penguins' presence, as well as individual's own accumulated experiences in that place — perhaps, in particular, past breeding success or failure.

Places, stories and penguins all emerge here in a process of entangled becoming (cf. Barad, *Meeting* 294). Of course, the specific biological, geological and historical features of only some landscapes make them suitable for penguin habitation. But in addition, penguins alter places through processes of burrowing, breeding, hunting, excreting, and more — in fact, excreta from penguins and other sea bird is often a particularly

important component of the nutrient cycles of small coastal islands — depositing nitrogen and phosphorus (Muller-Schwarze 26). Penguins and landscapes shape each other through the medium of a story that binds them together, a connection that is in some sense remembered, re-configured, and ultimately passed on to the next generation of penguins through their connection to a specific site determined by the cumulative experience of their forebears. Stories are not just layered over penguins or places here, but are active participants in the production of both. Ultimately, it is through the coming together of penguins, places, and stories that vital connections with safe lands beyond the edge of the water are maintained across generations, in no small way enabling the continuity of the species.

This is a relationship that goes well beyond what we ordinary mean by "habitat" — a term which seems to summon in the mind a purely physical set of relationships and features. In this context, habitat emerges as a largely interchangeable place: as is clear in the *Oxford English Dictionary* definition of the term, which notes that it is "chiefly used to indicate the *kind* of locality, as the sea-shore, rocky cliffs, chalk hills, or the like" (emphasis added). As long as a locality possesses the requisite ecological and biological characteristics it will be "suitable habitat" for the species. For example, in the case of little penguins, breeding habitat cannot be too warm (as they overheat easily on land); it must be close to a suitable food supply (because they cannot swim too great a distance while incubating eggs and guarding chicks); it must provide dry and secure burrows within easy distance of the water; and, it must also be home to a significant number of other little penguins.

As we have seen, while all of these characteristics are important they are far from being all that there is to the ways in which little penguins know and value their breeding places. Any piece of land that meets these requirements is not just as good as any other. Only one colony is "home," and within it, likely only one burrow. More than the sum of their ecological parts, these places carry penguin histories and stories. In focusing exclusively on "habitat" in accounts of penguin breeding places, we provide a framework of thought in which it is far easier to deny, or conveniently forget, both the real significance of penguin relationships with these *particular* places, and the fact that penguins inhabit their own richly meaningful and storied worlds. In Lestel's terms, penguins — like many other animals — are generators (and inheritors) of meaning (9).

Part III: Flying Foxes. Just after sunset every night in Sydney tens of thousands of grey-headed flying foxes leave their camps in the tall trees and fly out on their nightly quest for food. Blossom chasers with a taste for fruit when pollen and nectar are not available, they navigate the city following water ways and other landmarks, dodging

skyscrapers and power lines, drawing on their senses of sight and smell, and communicating with each other about where food is to be found. Their nightly travels take them through parks, streets, and people's backyards foraging for both native and introduced foods. Before dawn they return to their home camps where they spend the day hanging upside down in sociable clusters that look like odd bundles of fruit.

These flying mammals love to camp together; documentation exists for the fact that some camps of some species numbered in the millions (Eby, "Seasonal Movements" 553), but those numbers are no longer encountered. The species that is most common in Sydney is the grey-headed flying fox (*Pteropus poliocephalus*).[14] Like the other Australian Pteropus species, they navigate principally by sight, feed exclusively on plant foods, and are among the largest flying mammals on earth. With their long-distance capacity to pollinate and disperse seeds, they are a keystone species for the survival of the plants and ecosystems that depend on them. If flying foxes become extinct, either wholly or "in the wild," that which remains of Australian native forests will also be imperiled.

Photo by D. Rose

Their numbers have declined by 30 percent in ten years, and it is now estimated that the population is halving every 6.5 years (Booth et al. 11). The conditions of this vastly increased "modern mortality" include habitat destruction, persecution and killing (Martin and McIlwee 98), and increasingly involve periodic starvation events as well as summertime mass deaths from heat stress (Hall and Richards 50). After decades of efforts to eradicate this "pest," and with massive loss of habitat, this species was listed as threatened under the *Commonwealth Environment Protection and Biodiversity Conservation Act* 1999. At the same time, because they eat fruit out of orchards when their preferred foods are not available to them, they are still regarded as pests, and every year the National Parks and Wildlife Service of New South Wales, the body that has the legislative duty to protect them, also issues licenses to kill them.

Like little penguins, flying foxes are notable for their site fidelity. There are six main flying fox camps in Sydney, and these camps highlight many of the problems and possibilities encountered by an endangered species in the city. Nomadism and site fidelity are the two major trajectories of flying fox life. The nomadic pattern is to follow the blossoms, spreading out in smaller groups when food is dispersed, and congregating in larger groups when food is localized and abundant. Camps are sites to which the flying foxes return year after year to give birth and, later, to mate. Maternity camps are where flying foxes gather for protection of the very young, and are often where mothers give birth. Later in the annual cycle males establish mating sites on particular branches which they scent mark and defend against take-overs by other blokes. According to Hall and Richards (64), both grooming and vocalizing are important social activities, and with over thirty different calls, all of which are entirely audible to humans, flying foxes are generally classed as "noisy." In sum, life inside the camp has a rowdy character that changes with the demographics and intentions of the inhabitants.

Flying foxes accomplish their mobility and their fidelity through what Hall and Richards call "geographical memory" (104). This memory includes the camps where they were youngsters learning to fly, and contributes to a desire to return to that home. It will come to include the camps where mating took place, and will foster a return to that camp, perhaps even a return to the same branch on the same tree. It will include all the navigational signals that enable flying foxes to negotiate terrains by night both for local foraging and for long-distance travel. Geographical memory is not solely individuated, for while each flying fox must, it would seem, have his or her own memory, a great deal of communication takes place, and knowledge of the experience of one is transmitted to others. Peggy Eby describes camp sociality as spatially and temporally fluid. Some flying foxes are always leaving, and they do not all go to the

same places. Some return, and others arrive from elsewhere; they bring reports of what they have encountered. In Eby's view, information exchange is a significant source of knowledge amongst flying foxes.[15] Stories, therefore, are both localized and detailed, as well as extensive and pathed. Most of all, they engender an incredible determination to return to a camp, or, if the camp has become permanent, to stay.

Stories of place involve time and motion for flying foxes and for humans. The subjectivity of the story weaver is situated in the present moment, a place that connects with other times and places. The present moment — the emplaced now — is a site from which and toward which wider stories are generated and converge. In the words of Paul Ricoeur, the "now" is "constituted by the very transition and transaction between expectation, memory, and attention" (16). His approach helps us think of "now" as a practice, and his interactive definition seems to work as well for flying foxes as for humans. A flying fox story of a particular place appears to be a shared project, as it is sustained both by those who stay and those who depart and return. In both cases (and most flying foxes do both at different times), the element of return offers a key to the story — the return depends on memory, and demonstrates intentionality. Bracketed by the sense of past (having been here) and future (going there again), there is a moment of choice, a trajectory of storied possibility connecting past and future, and constituting intentional action in the on-going entanglements of creature, place and story. Storied-places, therefore, both camps and paths, are known and experienced through memory and expectation, through embodied knowledge of distance and proximity, through past stories and shared stories, and through individual determination both to travel and to return.

While the size of camps is shrinking, duration of inhabitation is being extended. In recent years, more and more flying foxes are becoming sedentary, and most new permanent camps are in cities or suburbs. Urban areas loom large in this story because they afford new survival opportunities for flying foxes, but they also offer their own hazards: electricity wires, barbed wire, netting badly placed over fruit trees in suburban back yards, obstacles such as tall buildings and airplanes, and dogs, among others. In place of dispersed, patchy sequential abundances of high quality food, cities offer continuous supplies. Often the food is not the high quality nectar and pollen that flying foxes prefer, and some of the camps are sub-optimal in terms of microclimate, but it seems that growing numbers of flying foxes are exchanging nomadism for sedentarism , and thus are choosing reliability, albeit of poor quality, over the increasing unpredictability they encounter as nomads.

The most spectacular Sydney camp is in the Royal Botanic Gardens. This heritage precinct is located at the edge of Sydney Harbour; it is an easy walk from Circular Quay and the Opera House, and for the past fourteen years it has hosted a permanent flying fox camp whose numbers vary from 6,000 to 22,000 (Dunleavy). The trees they have chosen to camp in are heritage trees, deemed to be valuable because of their rarity; they are non-native trees and they have suffered under the continuous presence of flying foxes (Leishman). In the years prior to the designation of grey-headed flying foxes as an endangered species, numerous methods were used to try to get rid of the unwanted camp. Tactics included ingenious methods such as lacing trees with bundles of python excrement (olfactory deterrence; pythons are one of the main predators of flying foxes), and lacing trees with fermented prawn paste (taste aversion). More seriously disturbing was the use of noise harassment in the form of a computer controlled system that blared out a variety of electronic sounds, randomly selected, setting up "a whirling effect of reverberating noises that creates a 'discomfort zone.'" When first tested (in 2001) the effect was to reduce the numbers of flying foxes in the target area by 90 percent. Those who refused to leave were males who had staked out mating territories and were completely unwilling to give them up (Richards 198-199). Since those trials in 2001 the numbers of flying foxes in the area has continued to increase.

Then in 2010 the Botanic Gardens was granted permission by the Federal Minister for the Environment to embark upon a thirty-year process of expelling the flying foxes through the use of noise harassment. Many concerned citizens have participated in public fora where they articulate their objections to the expulsion. In newspapers, on blogs, in legal challenges, and public events including educational events, people have remarked upon the inappropriateness of causing extreme stress to members of an endangered species for any purpose at all. Many remark upon the fact that this is a camp to which flying foxes have demonstrated extreme fidelity and, in its functions as both a maternity camp and a mating camp is crucial to reproduction. One of the scientists who works with flying foxes, Karen Parry-Jones, points out that one of the great benefits to humans is that the Botanic Garden is located far from residential neighborhoods; to shift the "problem" from that location is merely to dump it somewhere else. No one knows where the flying foxes will go, if and when they do. It is quite probable that the one large camp will break up into numerous smaller camps, and one can't help but wonder about the merit of transforming one problem into many.[16]

Photo by Nick Edards

In light of our argument in this paper, the flying foxes of Sydney have inhabited the city in ways that perfectly demonstrate a mutually beneficial entanglement of multispecies stories. The quality of life for both flying foxes and humans in the downtown area of this large and beautiful city is a case of symbiotic mutualism. Flying foxes have a camp where they have prospered, set in the center of a city surrounded by residential areas that have been extensively planted with both flowering natives and introduced trees such as figs. In addition to these specifically urban plantings, flying foxes are sustaining their co-evolved mutualists in Sydney's national parks, state forests, conservation reserves, regional parks, and nature reserves, of which there are over forty in the greater Sydney region. Humans, both tourists and residents, flock to the downtown area and take time to enjoy the flying foxes in the camp by day (they are sufficiently habituated to humans to not be bothered by people and cameras). In the late afternoon people watch the flying foxes belly dip in the lagoon, and in the evening they watch the flyout.

We wonder at the human determination to break up this mutuality, and about the long-term decision to assault a flying fox camp with aggressive measures aimed toward absolute expulsion. One of the most haunting challenges to our imagination concerns the destruction of camps. Casey's observation that to be emplaced is also to face the "unhappy prospect" of becoming unplaced (*Getting Back* xii), gestures toward the anguish of those whose homes are no longer inhabitable. Given the flying foxes' intense determination to return to or remain in camps where they have mated and given birth, the experience of those who return to find that the home camp has been rendered uninhabitable or even razed must be stressful and demoralizing in the extreme. As with the penguins, for whom a burrow is far more than habitat, flying foxes inhabit not just trees but worlds of meaning. As we imagine the experience of loss in light of our analysis of stories, memory, expectation and desire, we can see that the loss of a place to which flying foxes had formed attachments would leave them with much of their knowledge, memory, meaning, and sociality shattered.

Part IV: Urban Convivialities: Attentiveness to these kinds of tangled multispecies stories — histories of flying foxes and penguins in city places, newly arrived or pre-dating the city itself — work to disrupt the long western tradition of thinking in terms of an urban/rural dualism in which the city is seen as a strictly human space. As recent scholarship — especially from human geographers — has so clearly demonstrated, nonhumans have always been a part of the fabric of city places; all cities are inescapably multispecies affairs — for better or worse (Davison and Ridder 306).

As in many other places, however, the presence of animals in Australian cities has almost always been entirely on human terms.. Some animal species are welcomed as pets, but they are required to behave in particular ways (especially in public spaces). Other animals are tolerated as long as they stay in certain places — like the zoo or the park. Yet other animals that once lived in cities — livestock and poultry, for example — are now excluded from some urban spaces altogether.[17] Meanwhile, until very recently, the "wildlife" in our cities has been comprised almost exclusively of those species that happen to have been able to take advantage of, or simply survive in, urban environments (usually without drawing too much attention to themselves). Whether nesting under the eaves of a building or taking up residence in backyards, parks, or elsewhere, these species have had to fit into human plans and spaces. They have lived in cities on our terms, or not at all, and while cities have offered new niches and foods, they have also offered new perils.

It is in this context that we tell our penguin and flying fox stories, bringing to the fore other ways of storying city places. Emerging out of these stories we encounter an

opening into an ethic of conviviality for a genuinely inclusive multispecies city: a city that provides a space for the flourishing of as many different forms of life as possible. Here, "conviviality" points to a "kind of being together that is not reducible to shared identities — rather, it is a practice of temporary identification with others in a shared place. To make connections with others to cultivate the life of a city" (Fincher and Iveson). "Identification," in contrast to "identity," does not require that we share an essence or even a project, but simply that we are attentive to another's presence, to their way of being in a place. In the context of urban planning, conviviality cannot be engineered but it can be both accommodated and planned for.[18] Conviviality thus requires that we make an effort toward inclusiveness, that we endeavor wherever possible to make room for that other in our activities in shared places.[19]

With the exception of some recent work on "transpecies urban theory,"[20] however, it seems fair to say that the inclusivity imagined for many contemporary cities — under banners like "multiculturalism" and "cosmopolitanism" — is limited to *human* diversity in its many forms. Despite the relative lack of interest in urban ecology and its environments – an interest that is now fortunately, but slowly, growing [21] — it is clear that learning to live with nonhuman animals in city places is a vitally important task for our time. As more and more land is developed, and more and more people move into cities, urban environments are becoming increasingly important habitat for many species, while also providing the only encounter that many people have with nonhuman animals — encounters which may be important for human quality of life as well as for instilling much needed conservation values.[22]

The stories, places, and animals (human and not) that we have woven together here, offer some partial glimpses into the life of one multispecies city. In highlighting some of the ways in which this city and these places have been, and continue to be, home to penguins and flying foxes (as well as, we can safely assume, many other kinds of animals), our account aims to unsettle the hegemony of the anthropocentric city.

In the case of Manly, the stories that we tell about these beaches may center on their place within a larger city, but this is undoubtedly not the way that penguins know this place. They likely have very little sense of the city that lies beyond the foreshore. Penguins surely operate with an entirely different geography of this place, an entirely different sense of what it means, but also of the way in which it fits into and relates to the places around it. Like humans, penguins too experience the shoreline as a liminal zone at the edge of comfort and daily experience — but for them, unstable and exposed on land, it is the water that dominates life. From this perspective, Manly is not a city at

all, but a foreshore connected to an ocean and a harbor rich with the fish and squid so necessary for successful breeding. It is a rocky place that provides unconventional but solid burrows for protection from predators; burrows that include rock cavities, but also the dark and dry places underneath houses, sheds, boats and more. Perhaps more than any of the current advantages or disadvantages that it offers, Manly is a "home place" for these penguins. It is a place intimately known, used for generations, and although we understand little about the impulses or mechanics of philopatry and other forms of avian fidelity, it is clear that it is a place that calls out to be returned to.

The story of flying foxes takes us away from the sea and into the air, but many of the issues are the same. The city, from a flying fox point of view, is seen from above. Looking down, the relevant sights and smells are the flowers and the fruit. Flying out across the city, navigating by rivers and by memory, heading toward the night time meal, flying foxes dodge all the obstacles that for humans most materially constitute the city. When they look down, they probably do not notice humans at all. But humans, when they look up, see these glorious creatures racing across the sky. They fly along city streets sometimes almost parallel with elevated train lines. People have evening parties in their yards, and the flying foxes fly over. If the trees are in flower, flying foxes "join the party", contributing their scratchy noises and their sociable chatter. As journalist James Woodford wrote, "watching bats silhouetted against the stars is one of the greatest, but little known, pleasure of life" (Woodford).

We can now see that the place of wildlife in the city opens our engagement with the urban in ethically compelling ways. The city is not so much an objective fact as it is a specific material mode of storying — a way of understanding relating and becoming. It is a story, told and enacted by many creatures. And ultimately, this intersection of multiple storied-places and their tellers gives rise to an ethical question of particular importance for this time of anthropogenic change called the "Anthropocene": are we able to engage meaningfully with very different ways of knowing and living in a place? What would it mean, in a multispecies context, to really *share* city places?

This question is so novel in western thought that it is important to recall that many cities in the world appear to be imagined exactly as multispecies shared spaces (Fuentes, for example). But precisely because it is novel for us, we can take it as the beautiful challenge that it is: to bring story, place and animals (nonhuman and human) into a shared story that we call a city. In the multispecies city, stories are often incommensurate, but also overlapping, adjacent, and entangled. Places are differentiated, and by their very difference can be understood to be complementary. Humans do not live in burrows or tree tops; there is room for everyone. Flying foxes

pollinate the trees, penguins return to a busy harbour in the winter, and children are tucked into bed at night to hear flying fox chatter and penguin song.

The more-than-human city as a zone of entangled lives and deaths is an understanding yet to be fully realized. This staggeringly vivid, multi-storied, dynamic, entangled, and often divided account of a city in the Anthropocene is, in itself, indicative of another "story," using the term as we have defined it. It is a sequence of events with pattern and meaning, and what it tells us is that the story of the human-centric city is over: "zoöpolis is the name of the present and of the future" (Haraway "Zoöpolis"). But that is an understanding unevenly distributed amongst humans, and as a consequence, penguins and flying foxes continue to suffer. The lives and deaths of these creatures are here with us, entangled with ours, and short of ecocide they will remain so. Their presence can be understood as an ethical call, and the call can be experienced as a responsibility. In addition to responsibilities toward specific creatures and their desire, indeed need, to return to, or continue to inhabit, their storied-places, there is the wider responsibility to decentre the often taken-for-granted human-centric experience of the city. This will mean profoundly unsettling our understandings of these most settled of places. We will need to learn to see our human edifices, for example, not only as the congealed evidence of our ingenuity and handiwork but also as myriad opportunities and obstacles, delights and disasters, for nonhuman others.

In the great, open-ended, multi-voiced conversations of the storied-places that are cities, some species have fared far better than others, and all have frequently been sacrificed for the needs or convenience of *Homo sapiens*. Despite the considerable challenges and threats that cities produce, penguins, flying foxes and numerous animal-others continue to make their homes alongside people, for better or worse, often finding opportunities in the most unlikely of places. Much of what they respond to in the city was not meant for them, and the fact that they neither know nor care about that fact is in itself humbling. An ethics of conviviality puts the burden back on humans: to find multiple, life enhancing ways of sharing and co-producing meaningful and enduring multispecies cities.

Image credits

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Flying Fox photo 1: Photo © D. Rose.

Flying Fox photo 2: Photo © Nick Edards. Permission to reproduce granted.

Notes

1. On entanglement, see Barad, *Meeting the Universe Halfway.*

2. See Casey, "Getting Back

3. See Malpas; Ingold. For a general overview of these discussions, see Light and Smith.

4. See Haraway Modest_Witness; Barad "Posthumanist."

5. See Fuentes; Bekoff; Haraway, *When Species Meet*; Crist, *Images of Animals*; Hoffmeyer; Mazis; Rose, Cooke and van Dooren; Chrulew.

6. On this topic, also see White.

7. See Lestel.

8. See Curby.

9. See Serventy et al.

10. In addition, the study by Johannesen *et. al.* suggests that this willingness to change nests may be, to some extent, dependent on the availability of (what a penguin considers to be, and a biologist can recognise as) a "superior nesting site" (245). Another study, focusing on the Manly colony's closest penguin neighbors – at Lion Island, in the mouth of the Hawkesbury River – found a high degree of nest fidelity, but did not detect any significant relationship between breeding success and nest changes (Rogers and Knight).

11. See Rogers and Knight.

12. See Crist, *Images of Animals.*

13. See Crist, "Walking on My Page."

14. For further information on flying foxes see Rose

15. See Eby, *The Biology and Management of Flying Foxes in NS.*

16. The least ephemeral forms of public debate are available on the web in the form of articles, blogs videos, and television programs. See for example: Peril and Beauty in the lives of flying foxes http://www.ecologicalhumanities.org/peril.html; Remnant

Emergency Artlab's Sydney Botancal Gardens, Barangaroo X-tension Main Video: http://vimeo.com/17506825; Remnant Emergency Artlab's Bat-Human Project: http://www.remnantartlab.com/the-bat-human-event; http://www.edo.org.au/edonsw/site/pdf/casesum/110303bat_advocacy_casenote.pdf; http://www.abc.net.au/catalyst/stories/3000668.htm. All accessed 29 November 2011

17. See Philo; Gaynor.

18. See Peattie.

19. Steve Hinchliffe and Sarah Whatmore have also explored the possibility of a "politics of conviviality" in their work on urban nature (Hinchliffe and Whatmore). There are several points of convergence in our uses of the term "conviviality," and we are generally sympathetic to their project. Our work in this area, however, draws more heavily on ethology and ecology in an effort to better understand how some specific nonhumans understand and relate to their specific city-places. This approach is guided by the notion that genuine conviviality in shared

20. See Wolch, West and Gaines; Haraway "Zoöpolis."

21. See Davison and Ridder; Lunney and Burgin *Urban Wildlife*.

22. See Lunney and Burgin, "Urban Wildlife Management."

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