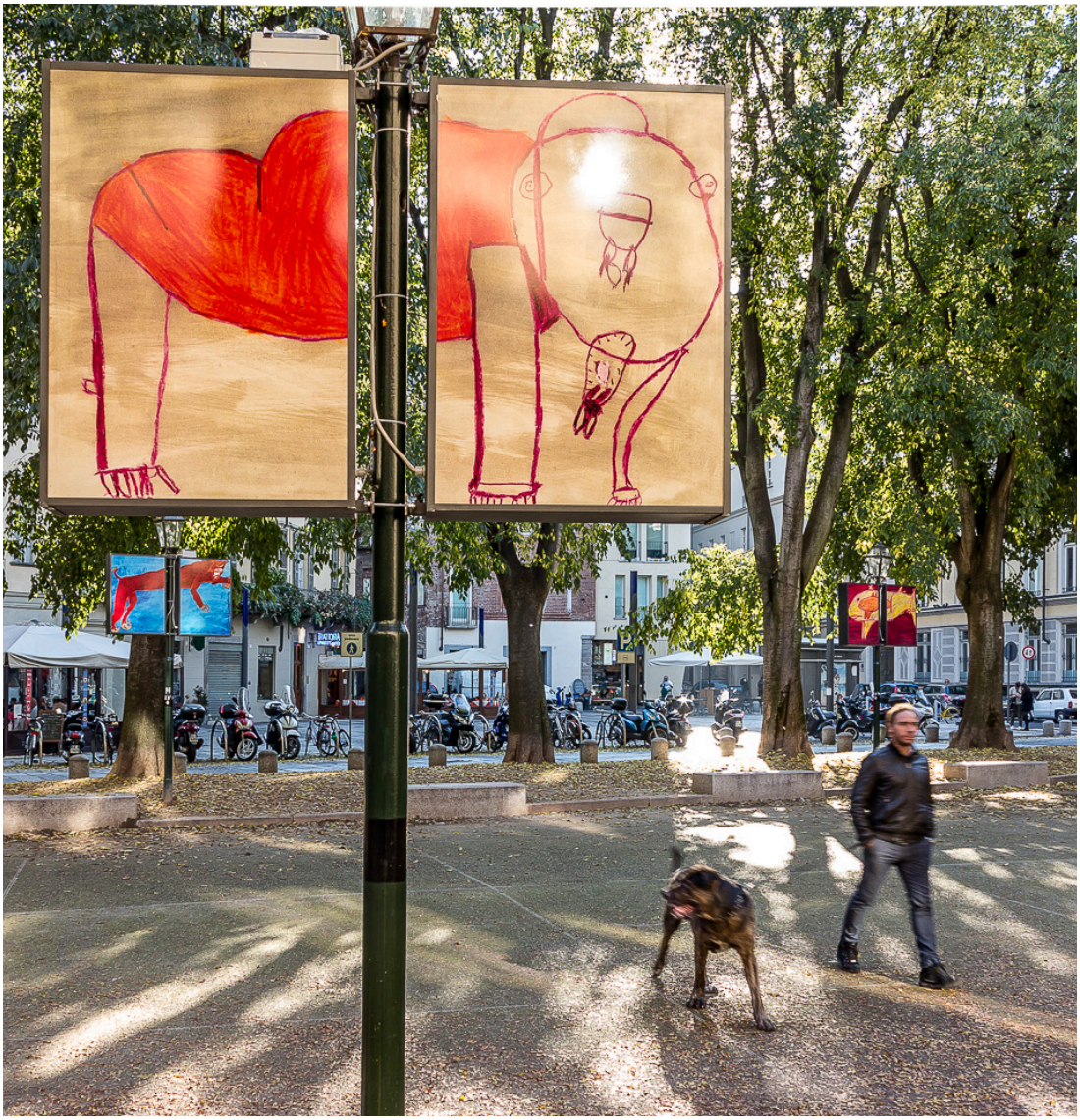
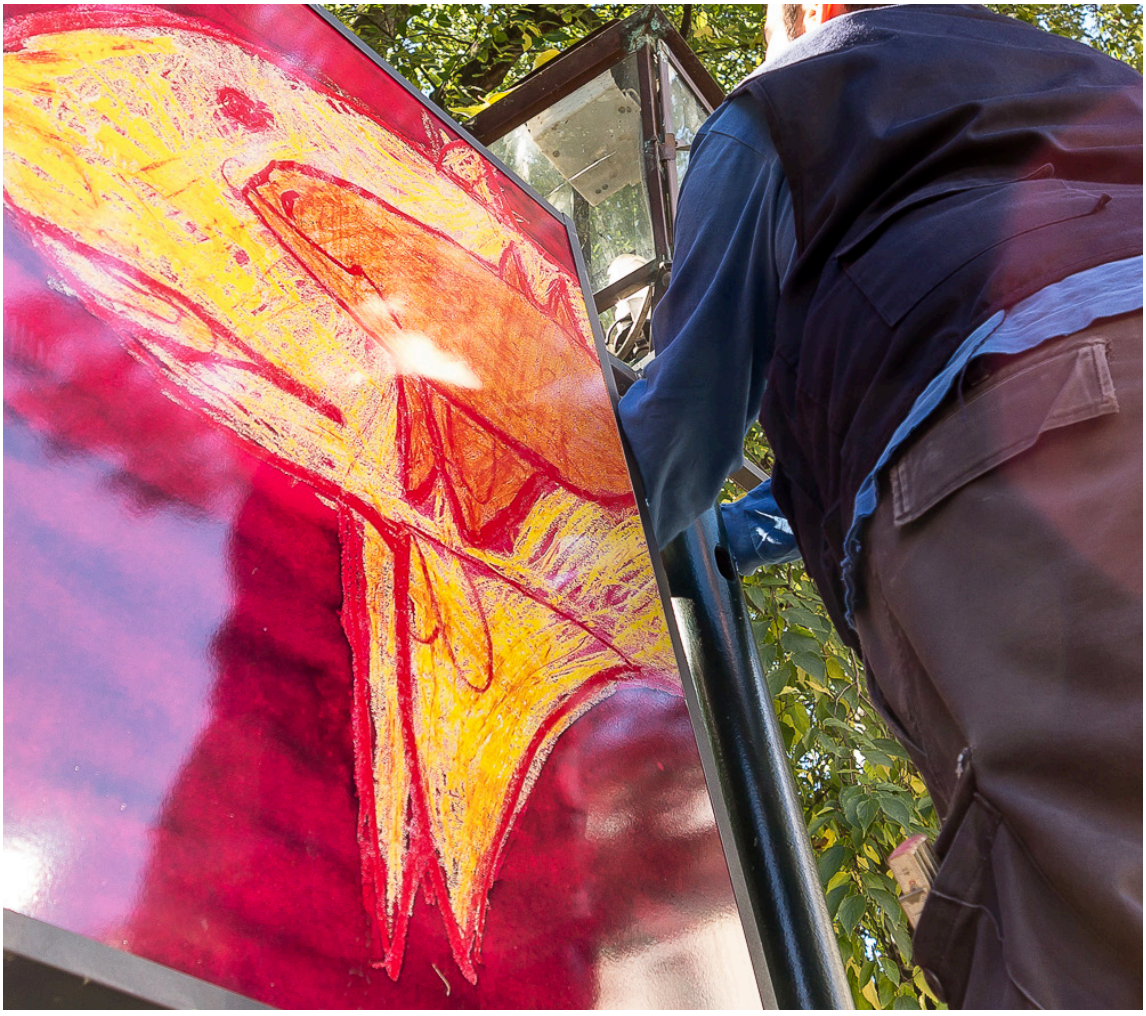


Explorations in Space and Society
No. 42 | December 2016
ISSN 1973-9141
**www.losquaderno.net**

**Urban Animals**

# 42 Lo sQuaderno



# TABLE OF CONTENTS

## Urban Animals

*a cura di / dossier coordonné par / edited by*
***Andrea Pavoni & Andrea Mubi Brighenti***

*Guest artist / artiste présentée / artista ospite*
***Luca Santiago Mora / atelier dell'errore***

# EDITORIAL

The city, the human-made environment par excellence, thrives with animals, differently visible and invisible, loved and hated, used, welcomed and cared for, as long as their diversity does not prove to be incompatible with urban regulations and expectations, in which case violence is often likely to emerge. Indeed, ambiguous is the relation between animals and the city. Animal spaces of attack and concealment, movement and vigilance, are always transversal to the traditional dichotomies that, deconstruction notwithstanding, still organise them. Human/non-human, civilised/barbarian, urban/wild: urban animals firmly problematise these cleavages, denying oppositions and rather indicating the existence of complex urban ecologies which are still to be fully explored.

In fact, as we enter the age of the radical modification of the planet by human activity, the ecological threshold keeps widening and complexifying, as the process of planetary urbanisation relentlessly ingests and reworks the spaces which we were used to define as 'wild'. Whether animals – either domesticated, stray, or straightforwardly wild – have always inhabited cities in many ways, in this increasingly urban world we may thus say that every animal, directly or indirectly, implicitly or explicitly, is in the process of *being urbanised*.

Yet, how does an animal become urban? On the one hand, by being entangled into social, cultural and legal configurations, semiotic and physical cages whose bars, however, always remain too wide for the animals not to manage to escape. On the other hand, far from being only the receiving end of this process, animals are also harbinger of urbanisation, twisting and shaping its logics, parasitically exploiting its gaps, producing its normative ecology in the coming-together with other human and nonhuman bodies within a single, shared environment. It is within this ever-shifting threshold, where urban and animal territories intersect and proliferate, that the contributors to this issue situated their effort.

We begin with Tora Holberg, who reflects on how animals are framed as *disposable*, and what is the role of waste itself in process, both as a symbol, and as a material product. 'Any animal is or can be a pack', Deleuze and Guattari once reminded us – and precisely this potential seems to trigger their denigration. It is in fact when they are transformed from (often named) individuals into anonymous crowds, that animals suddenly become *disposable*, like a pack of stray dogs or a colony of rats, ontologically equated to the very waste they feed on. Yet, what if waste itself could indicate a strategy to build a common ground beyond the choice between anthropomorphisation and forclusion? For instance, by rethinking waste from 'matter out of place' to 'signs of life', Holberg suggests – following Jousia Ozias – the possibility to rethink the nature of urban animals.

This suggestion is perfectly consistent with the position taken by Tony Preston-Schreck, who stresses the need to challenge anthropocentric categorisations of urban animals, based on their level of threat, utility or annoyance to humans themselves. Instead, and 'in spite of the physical and rhetorical boundaries imposed upon each organism', recognising their inseparability from human development, and thus 'their growing presence within our urban ecology will lesson their transgressive impact upon the human conscience'. This recognition will allow, again following Deleuze, to unfold an 'animal' (rather than 'human') relation with animals, towards that a state of coexistence Preston-Schreck calls *synanthropia*. It is exactly vis-à-vis to the limits

of such human-centred categorisations that Nelly Mäekivi, employing Jakob von Uexküll's notion of *Umwelt* and Almo Farina's notion of *eco-field*, sets up to propose a categorisation of urban animals emerging out of animal interaction with and through the city, rather than being imposed on them by an anthropocentric perspective. For his part, Morten Tønnesen explores in depth Uexküll's concepts in the case of urban corvids. He advances the notion of *Umwelt alignment* as a way to investigate the process through which corvids adjust their world to that of the city – for instance responding to direct or averted human gaze, a notion that may open promising avenues to explore animal adaptations to urban environment and the urban ecology emerging from them. Thus, the 'urban impossibles' described by Mäekivi – such as giraffes, mountain gorilla or snow leopard – are precisely those animals that, in Tønnesen's jargon, appear to be unable to *align their Umwelt* to the current conditions of urbanisation.

Nonetheless, such animals do indeed inhabit cities, although in the unique space of urban zoos. This is the context examined by the two following papers. In their empirical study based on the Helsinki zoo, Sanna Ojalammi and Nina Nygren register the significance of human-animal encounters in this peculiar setting, as well as the set of crucial socio-cultural and ethical questions it raises among the visitors. From a historical perspective, Wiebke Reinert reconstruct the role of an oft-overlooked figure, the *zookeeper*, a crucial mediator between the animal and the visitor. In both papers emerges the ambiguous role played by zoos in implicitly confirming and at the same time challenging the urban/nature dichotomy, as well as the ambiguous coexistence of the notions of *education* and *entertainment* internal to the dialectic of urban zoos since their inception, and even more relevant in their recent evolution, as testified for instance by this year's closure of the 140-years old Buenos Aires zoo, now being turned into an ecopark, with conservation and educational purposes.

Many would agree in assuming as 'unnatural' the image of a lion sitting inside a cage in Regent's Park. Yet Shelley Alexander and Victoria Lukasik interestingly note how the coyotes roaming Canadian cities tend to be similarly labelled. Singled out as *unnatural*, that is, *out of place*, they often undergo brutal violence through 'culls', i.e. indiscriminate large-scale killings employed as ruthless instrument of population control. In fact, there is nothing unnatural about coyote's presence in urban environments, which is instead the result of millennia-long process of adaptation. Contrary to the tendency of the social sciences and the law alike to position them outside of history, Alexander and Lukasik argue, a historical approach to urban animals is absolutely necessary to inform the due reworking of rhetorical representation, legal aspect and urban management and design which would allow for *re-placing* the coyote in a context where not simply human/nonhuman co-existence, but indeed co-flourishing, would be an attainable goal.

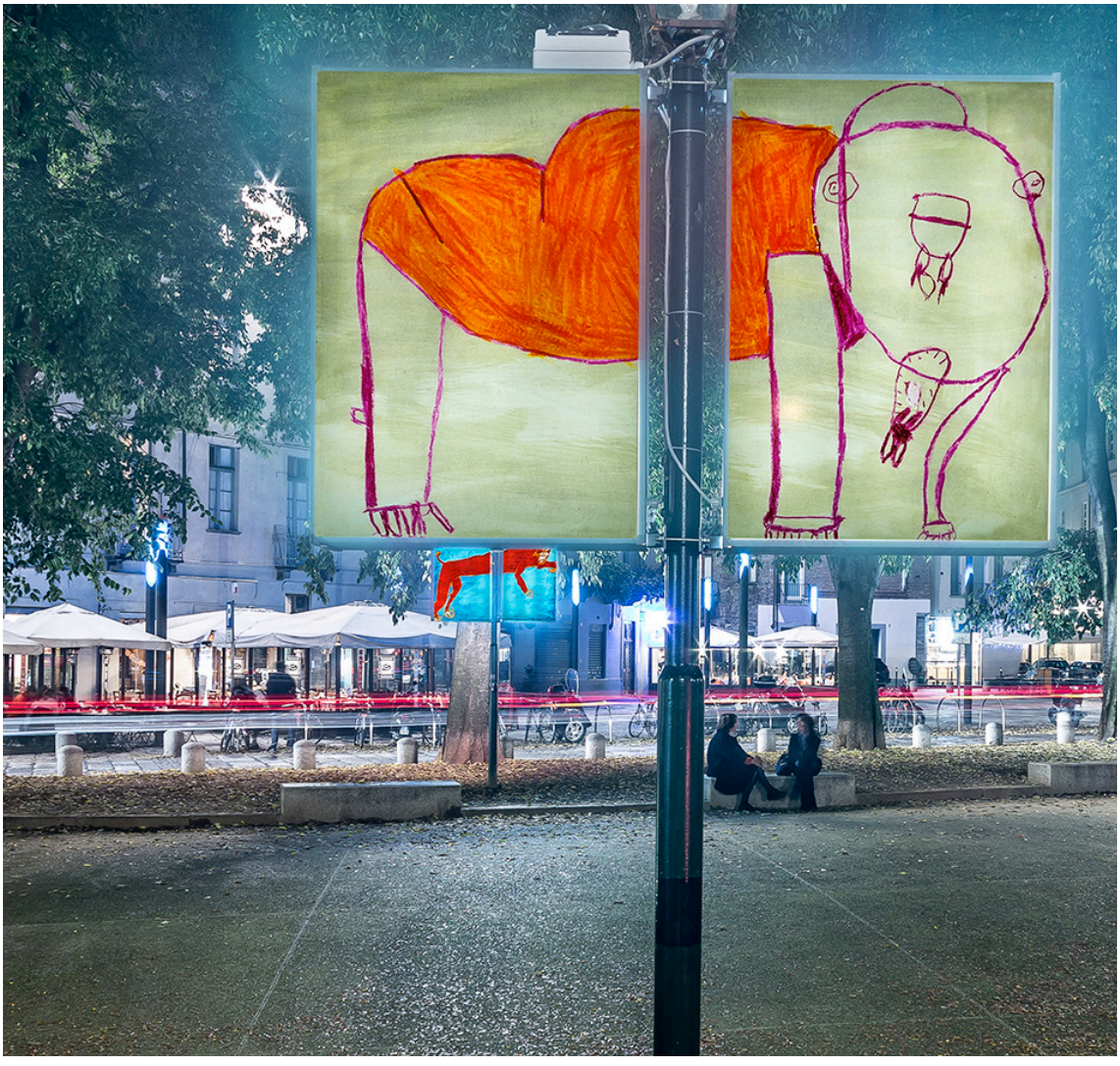
The ever-shifting quality of this relation is more generally explored in the following two papers. Pondering on the difference in stray dogs presence and politics between Turkey and the UK, Basak Tanulku reflects on the varying human-animal threshold vis-à-vis both the institutionalising processes of modernity and the impending reshuffling triggered by the ongoing process of global urbanisation. And, as Yoriko Otomo shows, the UK is not different from Australia and Japan in the ways in which law appears to systematically miss the complexity

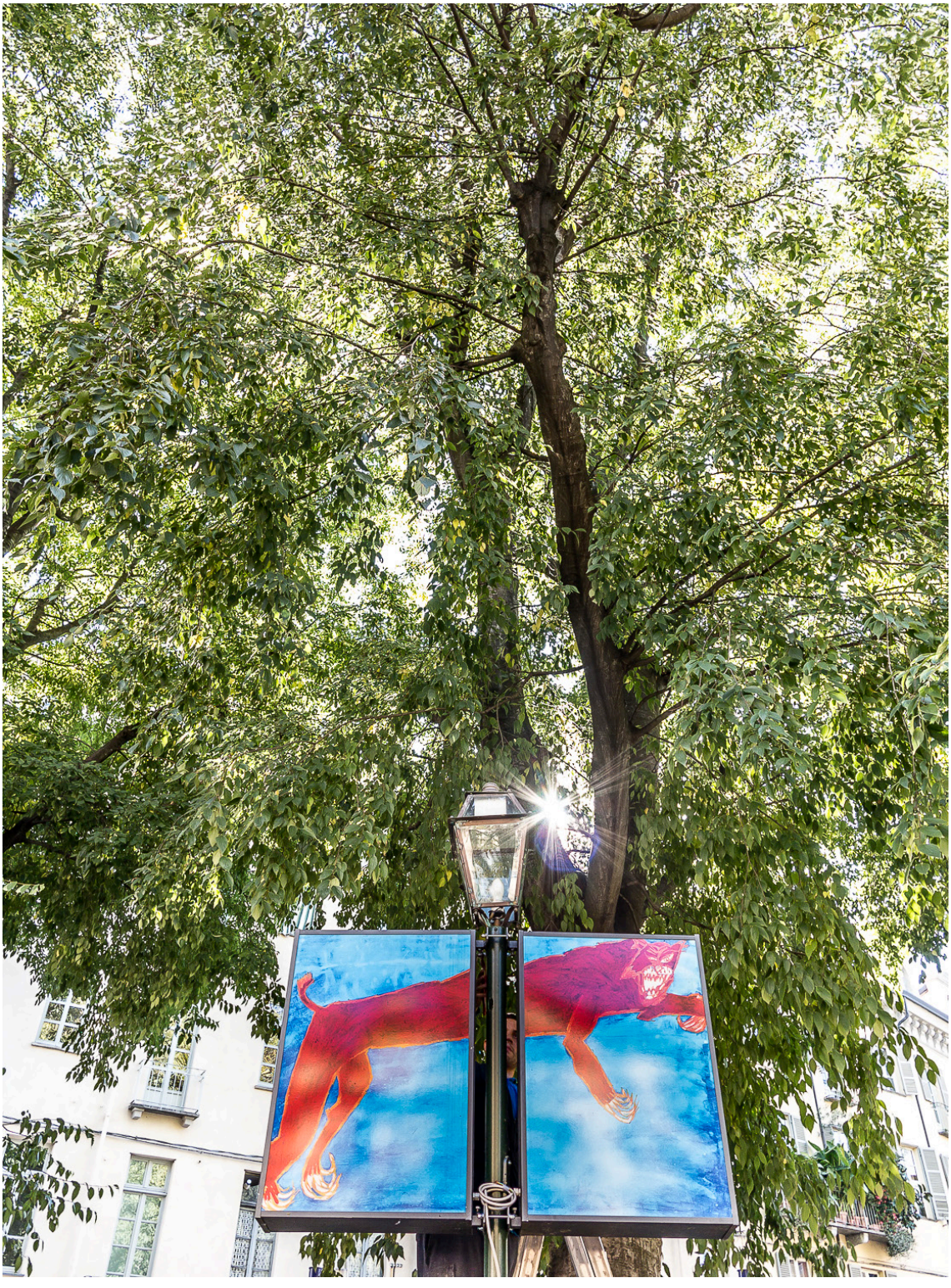
of the relation between animals and the city, consequently contributing to *invisibilise their presence*. This is all the more striking, as the cultural image of the animal appears to be ever-present in our social-media-fuelled imagination, with their urban-related victimisation, ever-increasing in the context of the anthropocenic climate change, still remaining in an uncomfortable background.

In the concluding piece, Irus Bravermann turns our attention to the most intimate of human-animal relations in the city, that with our *faithful companion*, the dog. Engaging in a dialogue with Jessica Pierce's recent *Run, Spot, Run*, Bravermann asks why in the US the pet industry is so prominent, hypothesising that the role played by capitalism is crucial in this sense. On the one hand, the ongoing commodification of dogs as an object of consumption, most troublingly explicit in the praxis of euthanasia – a *de facto* 'institutionalised and invisible killing' – facilitates the pet industry's profitable business. On the other, the extreme juridification, whereby 'urban folks in the United States have been legally, culturally, and emotionally cut off from any significant relationship with animals', makes it possible that purchasing a pet has in many cases become the only way to experiment a meaningful relation with animals.

These various and diverse contributions show the extreme variety of the complex urban ecology, emerging at the encounter between animals and humans in the structural and cultural context of the city. The non-anthropocentric, historical, ecological and geographical approaches represented in this issue are thus useful to advance insightful reflections on the danger of reiterated violence as well as the scope for a renewed coexistence.

AP & AMB





# 'Wastable' urban animals

**Tora Holmberg**

In the 2007 Disney movie *Ratatouille,* street rat Remy dreams of becoming a master chef. While his fellow rodent friends feed on garbage, our hero has a more elevated taste. His gastronomic aspirations are of course hopeless, a rat cannot cook and the right place for him is in the street, not among the pans. "Shut up and eat your garbage", Remy's father says. But then he teams up with the garbage boy Linguini and, in the end, together they take Paris by storm. The film, while featuring the classical underdog revenge plot, highlights how the rat, move from being 'out-of-place' in the kitchen. Through hard work and luck, he can become neutralized and 'in place' with such human spaces.[1] Remy the rat, Linguini the garbage boy, Paris and the gourmet restaurants, assemble an interesting mix of material-semiotic entanglements. In this essay, I discuss the interconnections between food waste, animals and urban space, through exploring the figure of 'wastable' animals. Questions I ask are: What makes an animal – human or non-human – vermin? What is common between a human 'dumpster diver' and a rodent one? How does one cross the boundaries between being integrated into urban ecologies, and becoming disposable as waste: potentially wasted or 'wastable'?

I have been researching this puzzle for years, and discussing it in public. Recently I was being interviewed for a nationally broadcasted radio program regarding a 'rat invasion' into the Swedish capital. The question for the reporter was, 'Why are we so afraid of rats'?

First of all: are we afraid of rats? If so, who are 'we'? Rats undoubtedly make an interesting case when exploring human/animal affective attachments. Rats are highly intelligent, social and flexible as they inhabit numerous (human) spaces. They are used and abused for all purposes; loved as pets, fed to other pets (e.g., snakes) and cherished in science as iconic experimental animals.[2] Millions, perhaps billions, of rodents are used globally every year in scientific experiments, and much of what we know about 'human nature', derives from behavioural research performed with rats. These critters also play important roles as projections of 'lowly' human traits, as deceitful, opportunistic, filthy and parasitic.[3] Projections in effect downgrade and stigmatize not only rodents, but also various humans. Ethnic groups such as Jews or Roma, and categories such as paperless immigrants and beggars. But rats are also admired as witty survivors, as Remy in the film *Ratatouille*, while rapidly adapting to any change in the environment, reproducing at speed and being good mothers. Consequently, a first answer to the reporter's question is: we are *not* always afraid of rats. Sometimes encounters create a whole different emotional register. But the question remains: why are urban rats despised and eradicated? And why now?

In the urban jungle, rats, in this case the subspecies brown rat, *Rattus norvegicus*, most often live hidden from our sight, in sewers and basements, abandoned greens and deserted alleys. The 'rat invasion' that the radio program referred to, emerged as a threat – and thereby scaring the human neighbors – when the nocturnal rodents, in daylight appropriated certain spaces like the street and the playground park. Youtube was spanned with video clips of rats, seemingly swarming the public

Tora is professor at the Department of Sociology, Uppsala Universitet. Her cultural sociological approach, combines science and technology studies, human-animal studies, feminist theory and urban sociology. Recent publications include *Urban Animals: Crowding in ZooCities* (Routledge, 2015) and *Animal Places. Lively Cartographies of Humanimal Relations* (eds. with Jacob Bull and Cecilia Åsberg. Routledge, 2017).

tora.holmberg@soc.uu.se

space from beyond, while swimming in water puddles and climbing up walls. They were transgressing spatial-temporal boundaries and becoming visible. When uninvited displaying their 'out of place-ness', they changed the place itself. The street or the park got transformed from safe to risky, from civilized to unruly. The process involves an important affective dimension: boundary crossing, uncanny creatures create fear, disgust, or, in other cases, affection, protection etc.

Another boundary concerns numbers. Urban animals may be tolerated as singles; a cat hanging out on a staircase, a few crows or pigeons in the park, and some suburban squirrels or foxes, make up pasture elements that remind human city dwellers of a nature out there (as if the urban space was ever void of nature). But when animals – human and non-human – move together as a *masse*, they get transformed from individuals to an undefinable 'crowd'. The crowd is a multitude of individuals, but act and move as one. The crowd can be either heterogeneous or homogenous, either way there is a close connection between the emergence and control of a crowd and the formulation of a social problem. A widely recognized understanding of the term is that the crowd is defined by its members' proximity, both materially and through identity politics. But the crowd can also be viewed as a mode, rather than a number of aggregated individuals acting together for a certain goal.[4] Effective bio-political technologies must be able to transform the crowd, like the Stockholm rats, and thus reduce the multiplicities, into an identifiable unit. A process through which the rats become vermin and thus killable.[5] In order to normalize the urban order, 'sanitation' is performed, eradicating the rats and restoring urban order and human control. This process has been called 'verminization'.[6] Thus, the process of verminization is one through which experiential frames of encounters, law and sensuous governance, shape and reshape human/animal relations in a particular setting. The animals 'take over' while the humans 'lose control'. When the animals become too many, the relationships too odd, the place too filthy and the human spaces overtaken, the *animaled* urban order is threatened. As the rats in Stockholm are getting too many, too visible, too tame, the pest fighters – as a second order waste workers – dealing with eradicating these wastable animals, have an economic upturn.

*But when animals – human and non-human – move together as a masse, they get transformed from individuals to an undefinable crowd*

Returning to the waste question I started with, does it matter that the rat invaders live off our leftovers? Rats are closely connected to waste in the cultural imagery, in a negative sense they become what they eat. "Shut up and eat garbage", as Remy's father says in the film, rats are dirt as they eat dirt. However, these and other animals may similarly be viewed as waste workers, as their livelihood depend on the stuff humans throw away. Rats and other waste workers, collect and transform the unwanted remains of human consumption. Indeed, as illegitimate but invisible waste workers, they are 'trash animals'.[7] For cultural and historical reasons, they embody species of, "a lowly order in our modern bestiary".[8] Trash, as has been pointed out, is a category, but moreover, it is a verb. As such, it has violent connotations. To trash is to destroy, to tear apart, to damage: "in this sense, 'trash' means a manner of physically relating to other beings. It is a mode of comportment, treating things without care, negatively and destructively."[9] Contemplating rats and verminization, it is worth thinking further about other contemporary examples of illegitimate as well as legitimate waste management. A while ago the news reported about local supermarket employees, who routinely urinated on dumpster food waste in order to hinder people from recycling it. Other more positive examples, however, show how food waste is going through a symbolic upgrading as over consumption and its effect on climate change is increasingly articulated.

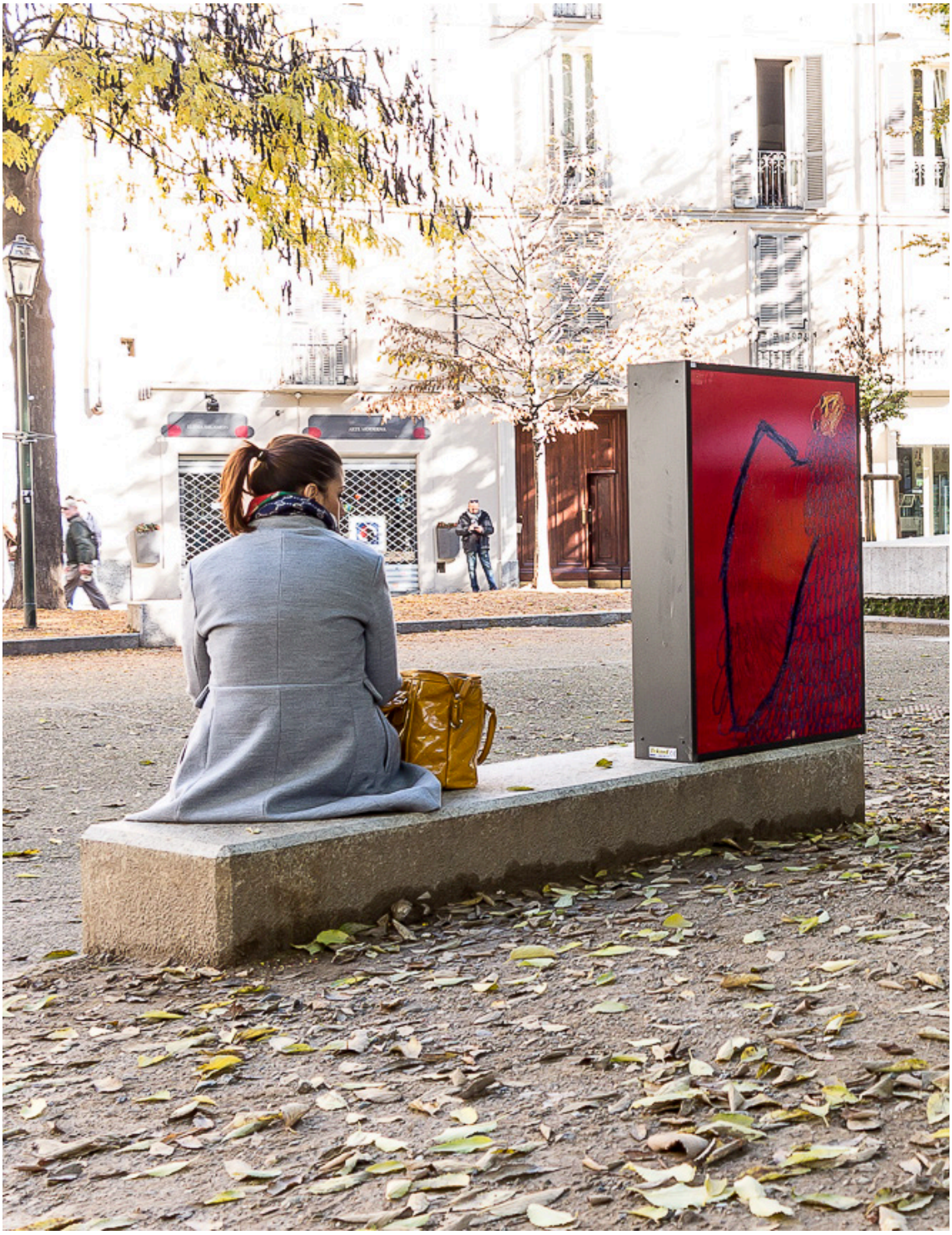
We can learn a lot about the structure, norms and values of a society, by studying waste management and the status and treatment of human as well as non-human waste workers. The normal urban pattern in the North, is that visible garbage – like household waste or litter on the street – gets cleaned up, made invisible, and disappears into the urban metabolism, through legitimate waste work. This invisible, already wasted, is in turn taken care of by illegitimate waste workers like rats and

other dumpster divers, challenging this normal regime. When transforming and elevating waste into something useful – food, nesting material or other valuable units – the order otherwise taken for granted, gets highlighted. By urinating on food waste or poisoning rodents, we say 'do not touch my consumption'. Rats may force us to reconsider what is considered waste, but also what and who can be discarded.

To wrap up the argument, lastly, I will dwell on the expression 'someone's trash is someone else's treasures'. Trash is thus not just about the unwanted or destruction and lack of care. It is also, at least potentially, valuable. It can, through the transformative powers of waste work, become something else, as elevated to another 'regime of value'.[10] Rejected stuff becomes translated into something desirable in a new context. The most obvious example of this might be the flea market, where what one person has thrown away may become transformed to a treasure. I argue that waste animals can be viewed in similar terms. That is, flipping to the other side of the coin, the unwanted and excluded rat and non-rat dumpster diver, is also clearly an indispensable part of the urban ecology. If we rethink waste, from 'matter out of place' to 'signs of life',[11] it might be conceptualized as a resource, as lively material-semiotic matter that connects species. Waste workers constitute invaluable actors, as intermediaries of significant multispecies relations. This view does not imply a denial of power relations or that nonhuman animals and human workers do not differ in standing and life worlds. Differences are significant and productive, but similarly, we depend on each other in all the complexity of the urban ecology. To stretch the analogy, 'we' need rats and their stories of places such as the park, the street and the Paris kitchen if we strive for a multispecies, urban conviviality,[12] a more equitable city where what and who becomes wastable is put into question.

Endnotes

1 Philo, Chris & Wilbert, Chris. 2000. *Animal Spaces, Beastly Places. New Geographies of Human Animal Relations.* London: Routledge.
2 Birke, Lynda. 2003. Who – or what – are the rats (and mice) in the laboratory. *Society & Animals*, 11(3): 207-224.
3 Burt, Jonathan. 2005. *Rat*. London: Reaktion Books.
4 Brighenti, Andrea M. 2010. Tarde, Canetti, and Deleuze on crowds and packs. *Journal of Classical Sociology*, 10(4): 291-314.
5 Haraway, Donna J. 2008. *When Species Meet*. Minneapolis: Minnesota University Press.
6 Holmberg, Tora. 2015. *Urban Animals. Crowding in ZooCities.* London: Routledge.
7 Nagy, Kelsy & Johnsson, Phillip D. 2013. *Trash animals. How we live with nature's filthy, invasive, and unwanted species*. Minneapolis: University of Minnesota Press.
8 *Ibid.*: 3.
9 Kennedy, Greg. 2007. *An ontology of trash: The disposable and its problematic nature*. New York: Suny Press. Also cited in *Ibid.*: 7.
10 Appadurai, A. 1986. *The social life of things. Commodities in cultural perspective*. Cambridge: University of Cambridge Press.
11 Reno, Josua Ozias. 2014. Toward a New Theory of Waste: From 'Matter out of Place' to Signs of Life. *Theory, Culture & Society*, 31(6): 3-27.
12 See van Dooren, Thom & Rose, Deborah B. 2012. Storied-places in a multispecies city. *Humanimalia*, 3(2): 1-27; Hinchliffe, Steven & Whatmore, Sarah. 2006. Living cities: towards a politics of conviviality. *Science as Culture*, 15(2): 123-138.



# Synanthropia
## Rhetoric of the Urban Wild

**Tony Preston-Schrek**

A problematized relationship between human and non-human animals exists within the rhetoric of wildlife and the pest. Frequently framed as a conflict involving a transgression, this dichotomous relationship separates humans from other organisms, with the human actor ascribing the role of transgressor. Maintaining distinct cultural relationships with these organisms is necessary for public safety and property management; however, the currency of this exchange is often inflated, though we veil this conceit with language.

The contours of our relationships rely upon spatial designations. As human development extends into the rural wilds, and the wilds venture into the urban, to what extent should our classifications of these ostensive transgressions shift based upon impacts to health, safety, property and agriculture? What thresholds should we maintain for ourselves when living with wildlife or with pests? How should our language reflect an increased recognition that synanthropic (*syn* – "together with" and *anthropos* – "human") organisms are inseparable from human development? Amending our rhetoric to address these organisms may help situate the increasing population of urban wildlife[1] within human ecology, thus moving us towards *Synanthropia* – a state of coexistence.

It is crucial to bracket my position within this discursive space of practice as a service professional. Titularly assigned Animal Damage Control Agent and Nuisance Wildlife Control Operator within different U.S. states, I respond to wildlife *conflicts*. That is to say, the majority of my conversations use *wildlife* and *pest* as pejoratives. With opposing sides framed by the legal and cultural language of the discipline, reliance upon a binary sets the property owner (client) and trespasser (wildlife or pest attempting to share habitats) as competitors for the same space. This language implicitly emnifies the trespassing organism as a criminal. As a witness to the increasing presence of wild organisms within urban and suburban settings, a growing rhetorical chasm has become apparent, which divides people from nature.

In modern urban society, wild lives are evaluated using differing classifications, with valuation incorporating ecological, social, and monetary impacts taken into consideration.[2] For example, *exotic* and *invasive* species are typically derogatory terms when compared with *native* and *indigenous*, but exceptions exist within each category.[3] Navigating the meanings of *wild* and *wildlife* reveal an opposition defined through contrast, as revealed in several U.S. state and federal statutes:

> Not ordinarily domesticated . . . Ordinarily living unconfined in a state of nature without the care of man[4] . . . [distinct] from those that are naturally tame and are ordinarily living unconfined[5]. . . found in a wild state.[6]

*Wild* versus *domestic*, *free* distinct from *confined*, *natural* opposed to *tame*, ostensibly differentiate

Tony is a wildlife professional situated within the confluence of human/non-human animal relations. With a background in Art and Biology, his former life was as a contemporary art curator and interpretive programs creator, where he taught in both university and community settings. He currently resides off the coast of Maine, where he continues to teach, write, and negotiate wildlife concerns for residential, commercial, and governmental clients.

tony@newsensewildlife.com

two categories of life: anarchistic life and life subjugated by humans. Environmental philosopher Jack Turner summarizes the *wild* as "self-willed, autonomous, self-organized . . . the opposite of controlled".[7] So stated, Turner conjures the allure and romanticization of the American wilderness mythos created in part by writers Henry David Thoreau and John Muir. *Nature* was posited as beyond the confines of the civilized (Thoreau: "Our village life would stagnate if it were not for the unexplored forests and meadows which surround it. We need the tonic of wildness. . ."[8]; Muir: "In God's wildness lies the hope of the world – the great fresh unblighted, unredeemed wilderness. The galling harness of civilization drops off, and wounds heal ere we are aware"[9]). Outside the familiar spaces of human culture, the spaces *out there* were difficult-to-access, if not inaccessible, places of mystic enlightenment. Is this mythology becoming *un*-wilded by urbanization?

*Is the pigeon a pest or an opportunistic wildlife specimen?*

The rhetorical crux of the *wild*life dilemma is found within our relationship with synanthropes. Defined as organisms bound by an affinity to *Homo sapiens*, synanthropes have developed niche associations with humans and their developments, which often include our own domiciles and agricultural lands. Distinguishing whether a synanthrope is classified as wildlife or pest requires assessment of its threat, utility, and/or annoyance to humans. The pigeon (*Columba livia*), for example, was invited to North America during an earlier century as a human food source. In the intervening centuries it has become quite comfortable occupying any space suitable for foraging – particularly concrete surfaces with human litter.[10] The once-wild organism (from Europe and Asia), turned domestic (North America), and then re-wilded (everywhere), now thrives in nearly every urban habitat and agricultural community in North America.[11] Is the pigeon a pest or an opportunistic wildlife specimen?

Synanthropic arthropods – insects and arachnids living in our midst – lead the infectious attack on human health in the United States with their threat presented in forms such as West Nile, and Zika[12] (from mosquitos) and Lyme and Tuleremia[13] (from ticks), in addition to numerous other diseases. Organisms associated with quantifiable damage or destruction to human agriculture fall under strategic management plans.[14] Residential and commercial pest management typically refers to numerous arthropods; and a selection of mammals – the Norway rat (*Rattus norvegicus*), the black rat (a.k.a. roof rat, *Rattus rattus*), and the house mouse (*Mus musculus*);[15] as well as birds[16] – the House Sparrow (*Passer domesticus*), Rock Dove/ (*Columba livia*), and European Starling (*Sturnus vulgaris*).[17] Terminology such as *invader*, *scourge*, and *vexation* help set these synanthropic organisms apart from other specimen of the wild.

Although individuals are ultimately responsible for defining whether specific wildlife comings and goings are transgressive, the cultural threshold remains enigmatic and situationally defined. A *threat* is an assumed condition impacting one or more of four principle categories: property, agriculture, health and safety, and natural recourses.[18] For many residential clients, a threat is species-dependent. The skunk (*striped skunk: Mephitis mephitis*) possesses the unique ability to impinge upon the olfactory aesthetics of place.[19] Whether on-site co-inhabitants or foraging passers-by, trailing skunk essence is absorbed by concrete foundations and wafts fluidly through open windows. The fragrance lingers even when contact with the liquid substance is avoided. With this in mind, how is satisfaction read in the disembodied remains of a biting mosquito smeared on the arm of the offended but not in the remains of the flattened skunk? To kill an arthropod seems analogous to preserving health and to keeping an infection at bay, while killing the skunk is objectionable. Questioning non-human animal sentience – arthropods are animals too – poses a variable of a greater, as of yet incalculable, equation with agency and free will only part of the calculus. Nationally, wildlife has accounted for

over 90% of all rabid animal cases since 1980.[20] Although there is regional variation, the top four reservoirs for the virus are raccoons, bats, skunks, and foxes. National trends show that a majority of wildlife conflicts include raccoons, bats, and skunks, which makes the potential for human transmission of rabies, among other zoonotic illnesses, a great concern.[21]

The bifurcation between *Homo sapiens* and the remainder of the animal kingdom is the first step in the linguistic distinction, differentiation, separation, subjugation and dominance over the other. This separation commences the process that allows for enmification and, ultimately, death.[22] By allowing this distinction, termination of the organism becomes more acceptable. Using superlative language like euthanize, dispatch, or exterminate serves as rhetorical surrogates for the ultimate outcome of killing a pest or wildlife specimen. This supplants the action's moral imperative, thus bringing question to the action itself. The reality is that human animals must also kill for survival; the rationale and manner of these actions must have culturally relevant answers.

The *wild*ness mythos is challenged when spatial separations break down. The inaccessible and the accessible become conflated as the "wild" crosses between the unconfined and the confined, forcing a reassessment of our definitions. When these spaces are routinely shared, human geographies become *synanthropic* geographies. With the synanthropic breadth ranging from roaches and starlings to coyotes and skunks, each organism has gained an independent status as wildlife and pest alike, though their connotative values are dependent upon individual or institutional interpretation. In spite of the physical and rhetorical boundaries imposed upon each organism, recognizing their growing presence within our urban ecology will lesson their transgressive impact upon the human conscience. Further, by extending the linguistic roots of "synanthrope" to acknowledge this new geographic awareness, a space of coexistence *cum* utopian romance called *Synanthropia* is created.

Determining the management actions for wildlife should incorporate a practical evaluative metric that asserts human needs, while addressing *Synanthropia* as an ethical goal. This linguistic turn acknowledges the power differential between human and non-human animals while implicitly exposing the moral and ethical questions inherent in our definitions. Acknowledging that this dynamic exists heightens our individual awareness, which in turn, strengthens our capability to operate humanely within the various jurisdictions of the *other*, encountered in the every day. Such actions will help distinguish *wild*ness within the urban setting, thus creating a sustainable model for the future *Synanthropia*.

## Endnotes

1 (2012). Sterba, J. *Nature wars: The incredible story of how wildlife comebacks turned backyards into battlegrounds,* Crown Publishers: New York. (2010). DeStefano, S. *Coyote at the kitchen door: Living with wildlife in suburbia.* Harvard University Press.

2 https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/sa_program_overview/ct_about_mission

3 The most controversial species is the feral cat: http://wildlife.org/jwm-study-domestic-cat-attacks-cause-variety-of-wildlife-deaths/; http://www.huffingtonpost.com/charles-knapp-phd/cats-as-invasive-species-_b_9320262.html; http://wildlife.org/wp-content/uploads/2014/05/Feral-Cats.pdf; In spite of being an "exotic species," the Ring-Neck Pheasant (*Phasianus colchicus)* is one of the most sought after game birds in the United States, with significant revenues generated annually to hunt the bird ( http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_054068.pdf ).

4 520 ILCS 5/1.2S—from Chapter 61, Par 1.2S

5 520 ILCS 5/1.3

6 Title 50: Wildlife and Fisheries, under the Lacey Act, 18 U.S.C. 42

7 (2014, August). *Sun Magazine*, "Not On Any Map: Jack Turner On Our Lost Intimacy With The Natural World" Issue 464, http://thesunmagazine.org/issues/464/not_on_any_map; also see (1996) *Abstract Wild*.

8 *Walden.* from "Spring," p. 238.

9 (1938). Wolfe, Linnie M. *John of the mountains: The unpublished journals of John Muir.* University of Wisconsin Press: Madison. p. 317.

10 2010, July 5. Brody, J. E. "Taking the 'Wild' in Wildlife Seriously," *New York Times*. Accessed on October 23, 2016.

11 https://www.allaboutbirds.org/guide/Rock_Pigeon/id

12 http://www.cdc.gov/westnile/index.html; https://www.cdc.gov/zika/

13 https://www.cdc.gov/lyme/; https://www.cdc.gov/tularemia/

14 http://ipmcenters.org/index.cfm/center-products/pmsps/

15 http://www.aphis.usda.gov/wildlife_damage/informational_notebooks/2012/Section_1_combined.pdf

16 https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php

17 Species identified as "injurious to wildlife" under the Lacey Act: https://www.fws.gov/injuriouswildlife/pdf_files/Current_Listed_IW.pdf

18 https://www.aphis.usda.gov/wildlife_damage/pdr/PDR-C_Report.php?p=index https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/sa_reports/sa_pdrs

19 Unfortunately, I have become desensitized to skunk essence, prompting extra scrutiny when interacting with *scent*-sitive clients or returning to my own home after handling the animals. Conversely, the compounds in skunk essence (thiols, among others), can induce vomiting in humans.

20 http://avmajournals.avma.org/doi/pdfplus/10.2460/javma.248.7.777

21 APHIS 2015

22 (1986). Keen, S. *Faces of the enemy: Reflections of the hostile imagination.* Harper Collins Publishers; (1991). Rieber, R. W. (Ed.) *The Psychology of War and Peace: The Image of the Enemy*.

# Wild animals in urban environment
## Subjectivity and relations

**Nelly Mäekivi**

Cities prove to be hybrid environments. The concept of hybrid is derived from the writings of French philosopher Bruno Latour, who applied the concept to describe different phenomena that have embedded in them the generally made distinctions between culture and nature, human and other animal (e.g. Latour 1993).1 Hybrid environments, in this case cities, are places where both humans and many other animals dwell; their lives are interconnected and influence each other. This paper turns its focus on other animals, more precisely wild animals, and discusses the relation of wild animals to urban environments. It must be stated, that the topic at hand will be treated in a way to attempt and avoid often present premise that anthropogenic influences have negative effects on wildlife. We shall discuss different instances, which also include showing how human activities might benefit certain species. Thus, a more elaborated account on animals in cities is given. To achieve the set goal, we shall analyse the relation of an animal to the urban environment through the lens of subjectivity of a wild animal by applying Baltic-German biologist Jakob von Uexküll's concept of Umwelt and Italian ecologist Almo Farina's concept of eco-field. These concepts enable us to explain the ways that human built artificial environment influences non-human animal in cities as compared to rural and more natural environments with much less anthropogenic influences. First, we will explain the concepts of Umwelt and eco-field, to emphasise the subjectivity of an animal as being central to further discussion. In the second half of the paper we establish an indicative relation between animal's species specific traits and environmental affordances with the help of aforementioned concepts. We aim to uncover the relation between animal subjectivity and the capability of adapting to novel situations, relations and objects that one may encounter in the city environment.

Nelly Mäekivi is a doctoral student in semiotics and cultural studies at University of Tartu, Estonia. Her interests lie in intra- and interspecies communication, ethology, anthropology, and human representations of other species. She is currently working on analyzing hybrid environments taking into account zoosemiotics, ecosemiotics and cultural semiotics.

nelly.maekivi@ut.ee

### Umwelt

Umwelt has proven to be an important concept in fields where animal communication is in the centre of attention. Umwelt indicates the meaningful world for the animal. Every creature, whether dwelling in urban environment or in a more natural habitat, is thus described by its Umwelt. Umwelt comprises of what the animal is capable of perceiving and what the animal is capable of acting upon or affecting: "each subject lives in a world composed of subjective realities alone" (Uexküll 1957: 72). In turn, what the animal is capable of perceiving and acting upon is dependent on the animal's species (e.g. animal's physiological build-up, communication channels, sign repertoire), cultural traditions (e.g. when the recording of alarm calls of crows are played, then crows in France congregate against the enemy, but the crows in America flee (Sebeok 1990: 24)), age, gender, personal dispositions and (e.g. distinguishing non-edible animals by taste (Payne, Tillberg, Suarez 2004: 848))

1 The writing of this article is supported by Norwegian-Estonian Research Cooperation Programme grant EMP151 "Animals in changing environments: Cultural mediation and semiotic analysis".

and the animal's physiological state (e.g. health). Thus, it is dependent on the individual who and to what extent the animal is capable of communicating with and, to a certain extent, how the communication situation is going to actualise. Taking into consideration animal's perceptual organs, habits, ecological relations, etc., it is possible to estimate, what is present and relevant for the animal.

With relation to urban environment, it is important to note that, depending on the species and individual, the objects and other animals that a certain individual is capable of relating to or communicating with, i.e. the meaning-carriers might differ from what the animal might encounter in less artificial environment. However, it depends on the complexity of the Umwelt of the animal under consideration, e.g. animals with simpler Umwelten (e.g. invertebrate) might perceive fewer differences than animals with more complex Umwelten. Thus, the factors that enable and influence communication may be alike in urban environments and in more natural habitats, which indicates, that in the Umwelt of the animal under scrutiny there are no perceivable differences; however, to many animals the differences may prove to be so vast, that many meaning-carriers might be absent and thus the possibility to fulfil all necessary activities for living might be hindered.

*If the animal is not able to incorporate any anthropogenic factors, then it will be where humans are not*

## Eco-field

An environment necessary to perform a certain function or activity can be called an eco-field, which means that in order for the animal to perform a certain action in a certain context, the spatial arrangement must correspond to that activity (Farina, Belgrano 2006: 9). It is reasonable to argue that in urban environment there is much less physical space for many species to occupy, however, for some species it might be the case that eco-fields are accumulated in the cities (e.g. if in a more natural environment the places to nest, rest, feed, etc. have much distance between them, then in an urban environment these eco-fields might be close to each-other or even overlap). Thus, for species that usually thrive in cities, most (if not all) of the relevant eco-fields for meaningful behaviour may be present and fit into limited quantitative space. On the other hand, for species, that cannot perform all necessary functions in the urban environment, some or most of the necessary eco-fields might be absent or unattainable.

One can thus assume that the effects of human-designed environment may affect various species differently. It proves to be more complicated to grant animals with rich Umwelten the necessary qualitative space (i.e. all the necessary eco-fields for species-specific communication), than for some other species, whose Umwelten are not so rich. The more complex the animal's Umwelt the more different kinds of eco-fields the animal needs and the more complicated it becomes to enable those spatial requirements in an urban environment. We propose that the appropriateness or suitability of a city environment for a specific animal should be considered through the presence of meaning-carriers necessary for actuation of different activities and also through availability of different eco-fields needed to fulfil all the activities of an animal. In addition to the presence of eco-fields, the degree to which an animal is able to perform the activities should also be taken into account.

## Wild animals and their relation to urban environment

There are many different ways that the urban environment and its ecological factors influence wild animal communication: the artificial materials and structures, available food sources, sound and light, roads and other barriers and other anthropogenic activities. We will concentrate on wild animals not including once domesticated feral animals (like often happens with cats and dogs) and also excluding wild but tamed animals kept as pets or in zoos and laboratories. The ground for classification of

wild animals in urban environments should be according to their relation to the city environment or how adapted they are to urban environments. Different authors often mention species who are urban exploiters, adapters and avoiders (e.g. McKinney 2002; Benton-Short, Short 2008), but there are more extreme and more intermediate cases that need attention. So the division with crossable and fluid thresholds could be: urban dependents, exploiters, tolerant, avoiders, and impossibles (McCleery, Moorman, Peterson 2014). This categorisation gives us the opportunity to consider animal subjectivity with the communicative affordances found in city environment. If, in addition, we consider the boundaries between given categories to be flexible, it will allow us to futher emphesise the importance of animal Umwelt in incorporating different meaning-carriers introduced to the animal.

Wild animals, that depend on humans to provide them with all the necessary eco-fields (e.g. places to eat, rest, nest, etc.), even though humans may not provide necessities for these animals intentionally (like they do for exotic pets), can be called urban dependents. Usually, these animals are comparably small (e.g. Norwegian rat) or move fast enough (e.g. rock pigeons and house sparrows) to be able to avoid humans even in high density city centres. These animals usually congregate in or near the city core, their density declines moving towards the suburbs, and are difficult to find in more natural environments. Thus, we can infer that all of the necessary eco-fields for performing their essential and non-essential activities are present in the urban environment (although these eco-fields may not be the same or even similar as the ones in their original native habitat). Also, all of the necessary meaning-carriers and possibilities to act upon them are present due to human activity. The affordances of the city match perfectly the necessities of the animals. However, we would also have to assume that being urban dependent means, that animals under consideration are not very flexible in their communication with the environment, e.g. meaning-carriers of food have been modified to the extent that animals might struggle identifying, locating and capturing food from non-anthropogenic sources. Same could be argued with regard to resting and nesting places, e.g. human made constructions provide eco-fields that function better than self-made or natural places to conduct everyday activities.

There are also wild animals that readily exploit anthropogenic resources available in cities, but these animals are more flexible in their behaviour (e.g. raccoons, coyotes, grey squirrels, red foxes, etc.) since they are not dependent on human provided resources. Given animals are distributed along the cities, but can be more easily found in places with green patches or in residential areas with low to medium density. Some of the species may reach greater densities in urban environments than in more natural ones. These animals can be considered as edge species due to them living in transitional areas between different types of habitat, which inherently are highly heterogeneous. The animals' communicational and behavioural flexibility indicates that meaning-carriers for them to act upon are also very flexible, they can quite freely incorporate new meaning-carriers to act upon, e.g. everything can be food from bread and dog food to garbage and occasional plastic. Obviously these animals also have all the necessary eco-fields present for performing different activities. It could be argued that urban exploiters are more adaptable to environmental changes than urban dependents, due to the fact that in their Umwelten they may have wide array of meaning-carriers for activities.

The category of urban tolerant denotes animals that may take advantage of some anthropogenic resources, but do not reach high densities in cities. They can usually be found in large green areas or suburbs that are close to more natural areas and their density quickly declines when moving closer to the city centre. Examples of these animals are bobcat, leopard in India, some bat species, red-eyed vireo, brown snake, etc. Urban tolerant animals are interesting due to the fact that they may have all or most of the most necessary eco-fields present and are able to complete all essential functions, but they are very sensitive to human disturbances (e.g. noise, lights, vibrations, humans themselves). Although much less flexible in their behaviour than urban exploiters these animals are prone to

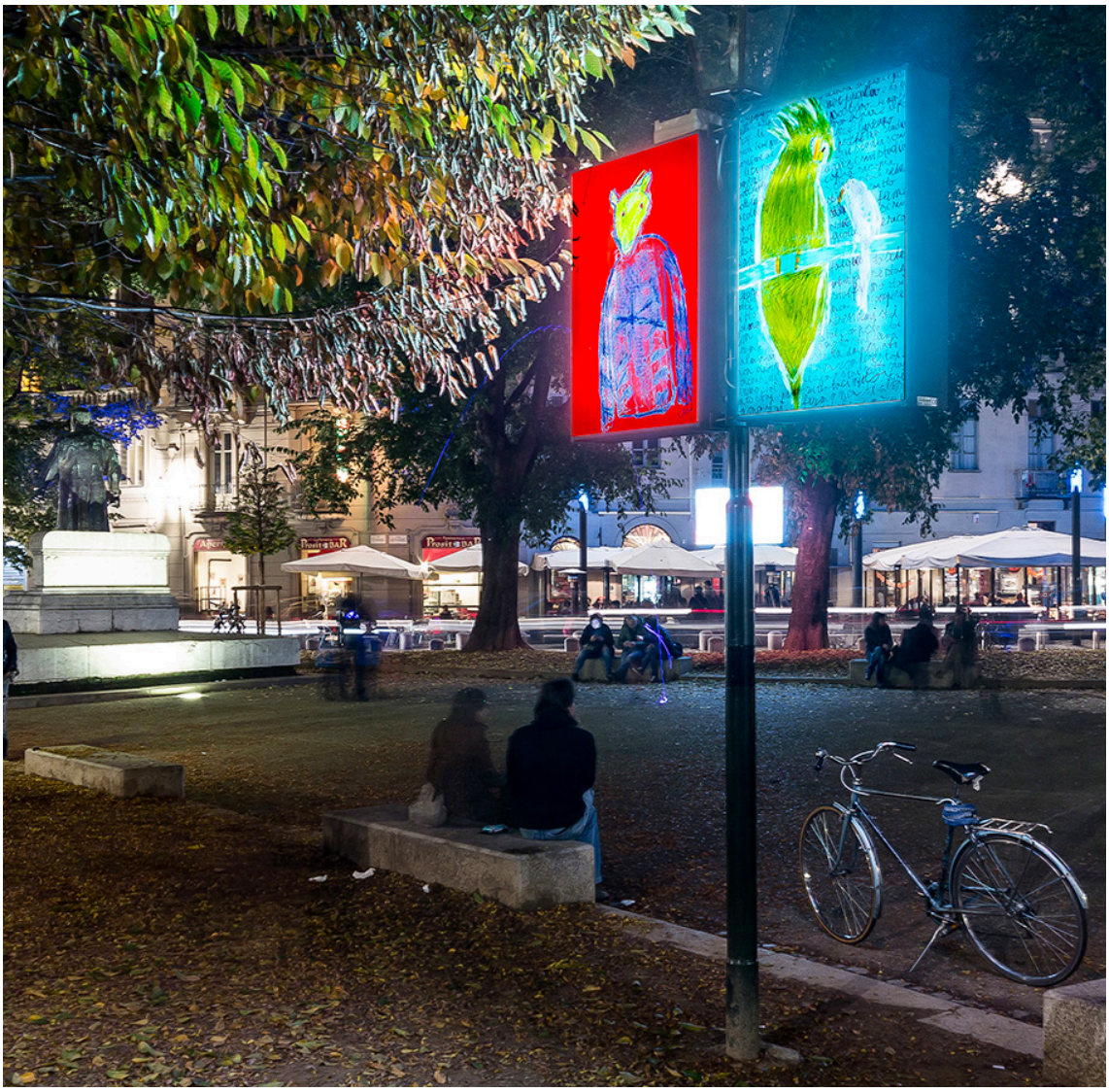
becoming new edge animals and, depending on the species and personal disposition, effectively incorporating new meaning-carriers to better adapt to anthropogenic activities. One of the examples is deer, who in some instances can also be categorised as urban exploiter. Thus, it is clear that the boundaries of proposed categories are fluid and, depending on the animal's Umwelt, crossable.

Another category that describes animals with less flexible behaviour is urban avoider. Wild animals in this category possess some behavioural traits that are in conflict with urban environment. These animals may be found at the margins of urban areas, but rarely even in suburban regions, unless they need to pass through the city. However, over time, depending on the flexibility of the behaviour, they may become more tolerant of anthropogenic disturbances. Examples of these animals are grey wolf, many native small mammals, and habitat specific birds. It is obvious that the urban environment does not offer all the necessary eco-fields for permanent stay (e.g., there might be food but not nesting places), some of the essential meaning-carriers may be absent, or some of the actions may be disrupted due to human activities.

Finally, there are wild animals that are absent from or near human settlements, due to their high sensitivity to anthropogenic activities. This category of animals can be titled as urban impossibles (e.g. spotted owl, mountain gorilla, snow leopard, etc.). It is obvious that most of the meaning-carriers and eco-fields for these animals are missing when considering urban environment, which means that no meaningful activities can be fulfilled. However, we will leave it to future studies to uncover, if even these animals may come increasingly into contact with urban areas.

## Conclusive remarks

Considering animal subjectivity gives us an opportunity to recognise not only anthropogenic influence on animals, but also the ways animals as active individuals can, to a higher or lower degree, correspond to man-made environment. Depending on the Umwelt of the animal, e.g. whether the animal can easily incorporate or add meaning-carriers, and the requirements for different eco-fields, e.g. whether natural or self-made resting places can be substituted with human-made constructions, the same anthropogenic factors may have different influences on different species. So, some birds in urban environments breed earlier than in rural environments – for instance, the European blackbird (urban exploiter); but some species, such as the Acadian flycatchers (on the border between urban avoider and urban tolerant) initiates breeding later, due to the fact that urban green patches are chosen when all the preferable nesting-places are already taken (Shustack & Rodewald 2010). If the animal is not able to incorporate any anthropogenic factors into its Umwelt, and can find no suitable eco-fields, then the animal obviously will be where humans are not.



## References


Benton-Short, L. M.; Short J. R. 2013. *Cities & Nature*, Second Edition. New York: Routledge.

Farina, A. & Belgrano, A. 2006. The eco-field hypothesis: Toward a cognitive landscape. *Landscape Ecology* 21(1), 5–17.

Latour, B. 1993. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.

McCleery, R. A.; Moorman, C.; Peterson, M. N. (Eds.) 2014. *Urban Wildlife Conservation. Theory and Practice*. New York: Springer.

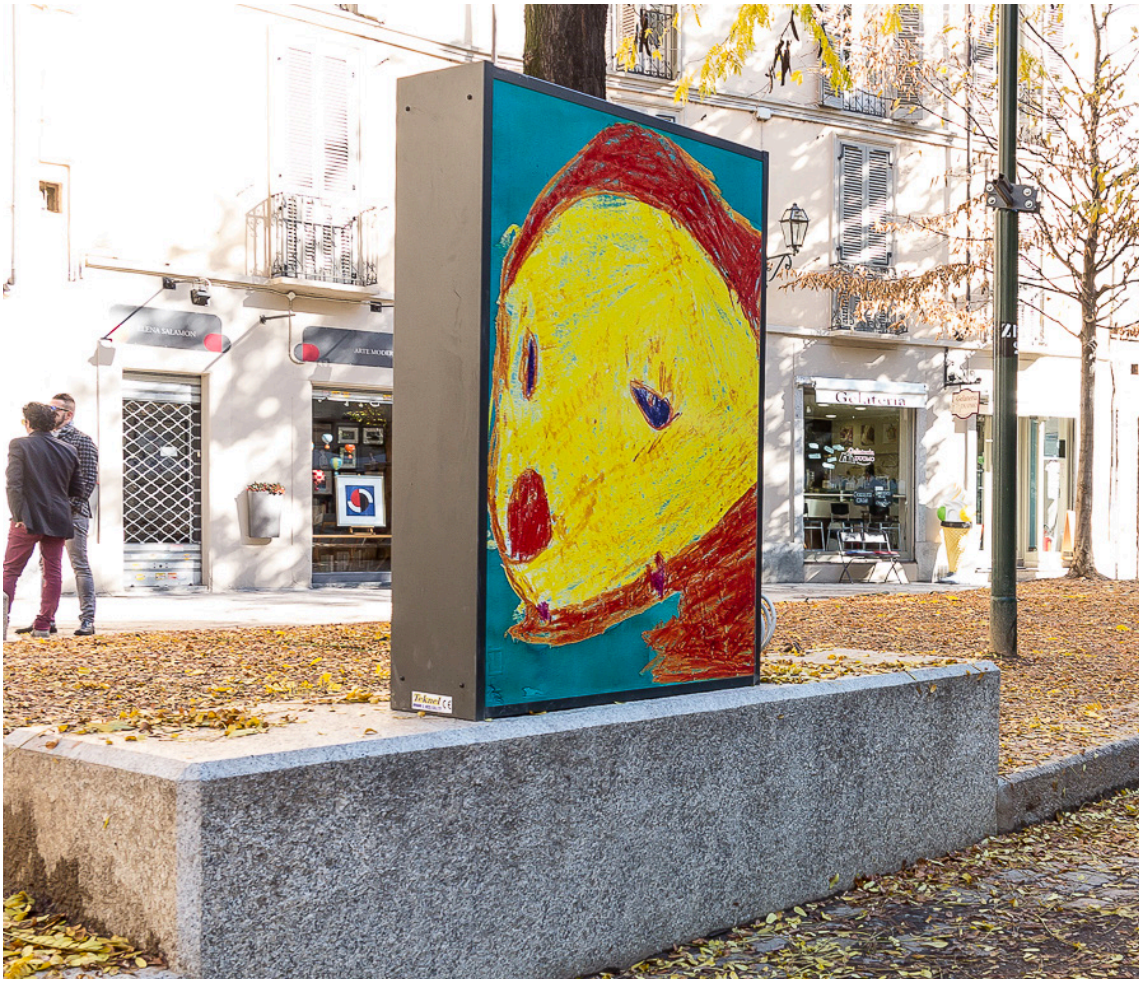
McKinney, M. L. 2002. Urbanization, biodiversity, and conservation. *BioScience* 52, 883–890.

Payne, C. M.; Tillberg, C. V.; Suarez, A. V. 2004. Recognition systems and biological invasions. *Ann. Zool. Fennici* 41, 843–858.

Sebeok, T. A. 1990. Communication in animals and men. In: Sebeok, T. A. *Essays in Zoosemiotics*. Toronto: Toronto Semiotic Circle, 15–36.

Shustack, D.P. & A.D. Rodewald. 2010. Attenuated nesting Season of the acadian flycatcher (Empidonax Virescens) in urban forests. *Auk* 127, 421–429.

Uexküll, J. von 1957. A stroll through the worlds of animals and men: a picture book of invisible worlds. In Schiller, C. H. (Ed.) *Instinctive Behavior: The Development of a Modern Concept.* New York: International Universities Press, Inc., 5–80.



# Urban corvids
## A bird's-eye view of towns and cities

**Morten Tønnessen**

Urban corvids such as crows and magpies are large, intelligent birds that are accustomed to humans.[1] Unlike doves and smaller birds, they are hardly ever fed by intent. Instead, they thrive in the shadows, as it were, of human civilization. More precisely, they tend to follow our movements and activities, with an occasional sneakpeek into what we are doing whenever we are not paying attention. The *Umwelt* (that is, according to Uexküll [2010], the experienced world) of urban corvids features human beings as quite prominent *Umwelt* objects – and yet, we hardly interact with them perceptually. Few humans pay much attention to corvids. There is little doubt, however, that we are being watched – indeed, that *you* are being watched by these "little brothers" from the sky.

Lurking in the hinterland of our civilization, one attention span away from us, urban corvids are opportunistic animals *par excellence*. As Sue Donaldson and Will Kymlicka (2011: 8) observe,

> human cities teem with non-domesticated animals – feral pets, escaped exotics, wild animals whose habitat has been enveloped by human development, migrating birds – not to mention the literally billions of opportunistic animals who gravitate to, and thrive in, symbiosis with human development, such as starlings, foxes, coyotes, sparrows, mallard ducks, squirrels, raccoons, badgers, skunks, groundhogs, deer, rabbits, bats, rats, mice, and countless others.

They are wild, yet accustomed to the ways of humans. Through a hidden and implicit alliance with the human kind, they have taken advantage of our expanding presence and resource utilization. In the age of the Anthropocene (Steffen et al. 2011; see also Tønnessen, Rattasepp and Armstrong Oma Eds. [2016]) – the epoch of *Homo sapiens* – urban corvids are blind passengers on the winning team.

The emergence of the Anthropocene, with its human-dominated landscapes, has involved the emergence of the human kind as a global species (Tønnessen 2010). But the rise of humans to ecological prominence has also benefited several other species – some intentionally, others by chance or mere opportunism. Our global colonial organism is hierarchically organised to the extent that it is intentionally organised by human agency. But our global dispersal, and that of our livestock and crops, has also "provided global breeding grounds for other species . . . from rats and doves to bugs and microbes of various sorts" (*ibid*., 98). Large urban birds are often regarded as a nuisance.[2] But they

Morten Tønnessen (born 1976) is Associate professor of philosophy at University of Stavanger, Norway. He is Co-Editor-in-Chief of the journal *Biosemiotics* and Chair of Minding Animals Norway. Morten has recently co-edited books including *Thinking about animals in the age of the Anthropocene* (Lexington Books 2016) and *The Semiotics of Animal Representations* (Rodopi 2014).

morten.tonnessen@uis.no

1 This article is in part based on the conference paper "Umwelt codes exemplified by Umwelt alignment in corvids", presented at the 2nd International Conference in Code Biology (Jena, Germany, June 16–20, 2015). The work has been carried out thanks to the support of the research project Animals in Changing Environments: Cultural Mediation and Semiotic Analysis (EEA Norway Grants/Norway Financial Mechanism 2009–2014 under project contract no. EMP151).

2 Here's a personal anecdote that illustrates the marginal status of large urban birds in contemporary Norwegian society: I once called the local wildlife committee ("viltnemnd" in Norwegian) because a seagull family with a newly hatched seagull

often perform waste management of sorts that we perhaps ought to be thankful for. In the words of Richard Inger of the University of Exeter´s Environmental and Sustainability Institute:

> If you consider all the wildlife that lives in the habitats in our towns and countryside, it might seem odd that we rarely see dead animals, apart from roadkill. This is because other animals act as scavengers and eat them. [...] It's a bit grizzly but crows and other scavengers, which are often perceived as pests and generally fairly unloved species, are performing a very valuable service. (cited in University of Exeter 2016)[3]

## Umwelt alignment

Many urban corvids, including crows, evidently prosper in part due to their relationships with human settlements and anthropogenic food sources. However, as I have indicated, human-corvid relationships are typically somewhat distanced – likely because, for one thing, corvids are often treated by humans as pest species. How can we describe the *Umwelt alignment* (Tønnessen 2014) between corvids and humans? First of all, what do we mean by Umwelt alignment? In dictionaries, "alignment" signifies an adjustment to a line, or arrangement into a straight line; a state of agreement or cooperation; the proper positioning or state of adjustment of parts in relation to each other; etc. Crucially, alignment can denote processes or states of *fitting-in* with others. If we define Umwelt alignment as the process of motional or spatial adjustment by one creature to the presence and manifestation of other Umwelt creatures (as well as to abiotic Umwelt objects and meaning factors), we realize that every Umwelt creature on this planet conducts Umwelt alignment on a regular basis, as manifested over time in concrete functional cycles (Uexküll 2010: 49).

Not all Umwelt alignment is mutual and cooperative. If Umwelt alignment is a practically universal phenomenon in the perceptual worlds of animals, then there must also be Umwelt alignment among natural enemies, and among competitors. *Keeping a certain distance* can be seen as emblematic of Umwelt alignment. The spatial distribution of specimens is central in human and animal social life alike (in the human realm, consider queue culture, intimacy zones, etc.). Naturally, there are also important ecological aspects of the spatial distribution of individuals. Such arrangements are relevant in the current context to the extent that the spatial distribution at hand is arranged by way of the *deliberate* adjustment of some Umwelt creatures to the presence of others. In nature, we can observe the existence of various forms of *autonomous* (voluntary) Umwelt alignment, and furthermore instances of *coerced* alignment. In human ecology, in the Anthropocene, this latter phenomenon is in many cases enforced and motivated more or less exclusively by human utility (as an example, think of the spatial distribution of specimens in industrial animal husbandry).

The regulatory mechanism of Umwelt alignment thus ranges from symbiotic strategies to more competitive forms of coexistence. In all cases, however, various forms of *synchronicity* are key. A study of Umwelt alignment between corvids and humans can be expected to shed light on human-corvid co-evolution, corvid Umwelten, and current human ecology.

## Corvids' alignments

Corvids are large-brained social animals, with complex cognition that draws on causal reasoning,

---

baby had settled just outside our front door – we were living close to the town center. I was worried that the traffic (bikes and pedestrians) put the seagull baby in danger, and wanted advice on how to best handle the situation. The advice I got was pretty clear, but not of the kind I had anticipated: "Just grab it by the neck and thump its head forcefully against the wall a few times".

3 In respect of this, Schilthuizen (2016) observes: "With urban environments expanding all over the world, wildlife and biologists alike are starting to treat the city as a true ecosystem." He argues that when changes in the urban environment spread internationally, as a result of cultural fashions, learning or policy, "urban wildlife everywhere will be faced with the same novel challenge." The speed and conformity with which this can happen, he implies, might speed up evolution considerably. "Those that evolve adaptations will also easily spread to other cities, leading to a truly globalized urban flora and fauna – continually evolving at breakneck speed to keep up with an increasingly human-dominated world" (*ibid*.).

flexibility, imagination and prospection (Emery & Clayton 2004). Several corvids have "excellent observational spatial memory" (ibid.), and they appear to demonstrate a "propensity for representing animate beings as causal agents". In other words, they have the much-hyped theory of mind – the capacity to relate to other beings as intentional beings in their own right.[4] "In food-caching corvids," write Emery & Clayton, "object permanence is essential for the successful recovery of cached food".

In an interesting study, "Do American Crows Pay Attention to Human Gaze and Facial Expressions?", Clucas et al. 2013 (p. 296) tested "whether American crows (*Corvus brachyrhynchos*) were sensitive to human facial features under field conditions by comparing flight initiation distances and urgency of escape behaviour to human approaches varying in eye contact and facial expression." They first tested whether crows could distinguish "between an approaching human [1 m distance at minimum] who is directly gazing at them and a human approaching them with an averted gaze". In this experiment, the researchers found "that crows fled sooner and more urgently when humans were directly gazing at them". This seems to indicate, in my terms, that there is Umwelt alignment between crows and humans with crows as adjusting agents.

*Being in my garden, once they notice my presence, they tend to flee quicker the more directly I look at them, and/or direct my face towards them*

In a second experiment, "crows responded sooner to a direct *vs* averted gaze; however, they did not react differently to varying human facial expressions [smiling *vs* scowling]". In other words, crows appear to relate to and be sensitive with regard to the human gaze, but not to interpret various human facial expressions as indications of threats etc. This might be because the human gaze alone is a sufficiently reliable indicator of human behaviour. The researchers in the study distinguished between more or less urgent escape responses (*ibid.*, 298): a) Low urgency: Crow walking or not moving; b Medium urgency: Crow hopping/running away; c) High urgency: Crow flying away. In the first experiment, "[c]rows approached with direct gaze responded with the highest urgency (flying) 71.4% of the time, while those not gazed at only flew 42.0% of the time". The researchers reason that "crows may interpret direct eye contact from an approaching human as a potentially threatening situation or simply [infer] that they are the focus of the human's attention" (*ibid*., 299). "As a species living in human-dominated environments, this awareness [of the human gaze] allows crows to devote more time to foraging and other activities while in close proximity to people passing by that are not focusing their attention on the crows". In this manner, crows manage to keep their desired distance to human beings, all the while taking advantage of anthropogenic food sources. In conclusion, Clucas et al. "suggest that crows use human gaze as a reliable visual cue . . . when making decisions about responding to approaching humans" (*ibid*., 297). Their study proves that wild corvid species can adjust behaviour in response to their perception of the human gaze.

## Looking ahead

Can these findings be generalised? I think they can. In my own everyday observations, I've noted that both hooded crows (*Corvus cornix*) and magpies (*Pica pica*) are very sensitive to the human gaze, and probably also head orientation. Being in my garden, once they notice my presence, they tend to flee quicker the more directly I look at them, and/or direct my face towards them. This phenomenon of motional sensitivity to the human gaze in some corvid species has now been established as a fact. Further work could examine: How did it emerge? What more corvid species does it occur in? Do some

4 I am convinced that the mainstream thinking on such issues is somewhat misguided due to anthropocentric bias. But at any rate the fact that scientists can acknowledge that corvids have theory of mind is reassuring.

corvids take advantage of individual familiarity with specific humans in their interpretations – and does this make their interpretations more reliable, or more nuanced? And, does this ecological code (Farina 2014) vary in different regions of the world, depending on differences in human comportment (body language etc.)? As for the notion of Umwelt alignment, a few observations can be made based on the crow study: Umwelt alignment can be either mutual or (as in the current example) unilateral; and it can take on different forms. These include communicative response to perceived problem (Intended to elicit behavioural response from the other(s)), and, as in the current example, motional response (Intended to solve problem).

## References


Clucas, Barbara, John M. Marzluff, David Mackovjak & Ila Palmquist 2013. Do American Crows Pay Attention to Human Gaze and Facial Expressions? *Ethology* 119: 296–302.

Donaldson, Sue and Will Kymlicka (2011). *Zoopolis: A political theory of animal rights*. Oxford and New York: Oxford University Press.

Emery, Nathan & Nicola Clayton 2004. The mentality of crows: Convergent evolution of intelligence in corvids and apes. *Science* 306 (5703): 1903–1907.

Farina, Almo 2014. Introduction to ecological codes. URL: http://www.codebiology.org/introduction_ecological.html

Schilthuizen, Menno (2016). Evolution Is Happening Faster Than We Thought. *The New York Times*, July 23rd 2016.

Steffen, Will, Jacques Grinevald, Paul Crutzen, and John McNeill (2011). The Anthropocene: Conceptual and Historical Perspectives. *Phil. Trans. R. Soc. A* 369(1938): 842–867. doi:10.1098/rsta.2010.0327.

Tønnessen, Morten 2010. The Global Species. *New formations: a journal of culture/theory/politics* 69: 98–110.

Tønnessen, Morten 2014. Umwelt Trajectories. *Semiotica* 198 (Special Issue on zoosemiotics, guest-edited by Timo Maran): 159–180. (DOI: 10.1515/sem-2013-0106).

Tønnessen, Morten, Silver Rattasepp and Kristin Armstrong Oma (eds) (2016). *Thinking about animals in the age of the Anthropocene*. Lanham, Boulder, New York, London: Lexington Books.

Uexküll, Jakob von 2010. *A foray into the worlds of animals and humans – with A theory of meaning* (Posthumanities 12), Joseph D. O'Neil (trans.). Minneapolis & London: University of Minnesota Press.

University of Exeter (2016). Scavenger crows provide public service, research shows. *Phys.org* July 12th 2016. URL: http://phys.org/news/2016-07-scavenger-crows.html

# Animal encounters at the Helsinki zoo

**Sanna Ojalammi**
**Nina Nygren**

The largest urban centre in Finland, the city of Helsinki, has a population of approximately 620,000 at the turn of the year 2016, and the whole metropolitan area has about 1,5 million human inhabitants. Helsinki is also a home to 46 wild mammal species (City of Helsinki 2016). Over 120 bird species nest in Helsinki (City of Helsinki 2016) and the city hosts a vibrant bird watcher community. Reptiles and frogs instead have declined (City of Helsinki 2016). When listing animals living in urban areas, animals belonging to pet, farmed animal and zoo animal categories are usually omitted. In this article we are looking at zoo animals as urban animals. Modern, urban zoos give the illusion of "nature" and "wilderness" inside the city. These "natural" spaces are constructed with great effort and detail, yet this human effort is made invisible.

On the other hand, "wildness" is heavily confined and controlled in the zoos – the animals are not allowed to predate live animals, they are prevented to harm each other and the human spectators, they are cured when they are sick or even put down (Braverman 2013). Zoos can be understood as designed areas for the public viewing of animals (Anderson 1995; 1998) and seeing animals is the main reason also for visitors (Roe & McConney 2015, 879). Globally zoos and aquariums get over 700 million visitors per annum. Many zoos keep especially exotic, charismatic animal species (megafauna) and therefore they are popular tourist attractions (Skibins & Powell 2013: 529). Zoos can be seen as choreographed and constructed places for controlled human-non-human animal interaction – zoos control and guide the interaction between the visitors and the captive animals in many concrete, subtle and practical ways (Braverman 2013). Zoos have undergone a transition over the past 20 years, they are moving from entertainment to nature conservation and conservation-based education (Wijeratne *et al*. 2014; Ballantyne *et al.* 2007, Smith & Broad & Weiler 2008, Beardsworth & Bryman 2001). We have studied how visitors at the Helsinki zoo (Korkeasaari) see conservation, and in this article we explain some of our findings.

## Data and methods

The Helsinki Zoo, located at the Korkeasaari island, was established already in 1889 as a place where people can spend their free time. The zoo is owned by the City of Helsinki and it is one of the oldest zoos in the world. Currently the zoo keeps 170 animal species and almost 1000 plant species (City of Helsinki 2015). Annually the zoo receives on average 500 000 visitors and sells about 7000 yearly entrance cards. The zoo also has nature school and a wildlife hospital. Annually the wildlife hospital receives about 800-1000 animal patients.Korkeasaari Zoo is part of the global network of zoos: World Association of Zoos and Aquariums (WAZA), the European Association of Zoos and Aquariums (EAZA). The Zoo is also a member of the IUCN (the International Union for Conservation) and participates in the zoo network in breeding endangered and rare species.

Sanna Ojalammi is an independent researcher and currently working part-time by conducting varied research work at the Research Co-operative, Tapaus, at the city of Tampere. Research themes has been such as land conflicts, land tenure and policy interface and development of management policies. Recent post-doc research, at the Natural Resources Institute, Finland, was focused on the geographies of biopolitics and on natural resource conflicts, wildlife (wolf) management policies and emotional aspect of predator animals and its interconnection to rural people's life worlds in SW-Finland.

sannah880@gmail.com

Dr. Sc. (Admin) Nina V. Nygren is currently University Lecturer of Environmental Policy at the School of Management, University of Tampere, Finland. Her research is focused on collaborative nature conservation. She is also a chairperson of the board of directors, founding member and a project manager at the Tutkimusosuuskunta Tapaus, the first research cooperative in Finland. The research cooperative is focused on qualitative research, e.g. on nature conservation and environmental conflicts, and on facilitating collaboration.

nina.v.nygren@iki.fi

Our research was commissioned by Helsinki zoo and was carried out through our Research Cooperative Tapaus. Helsinki zoo wanted to know how their conservation aims were understood by the visitors. In total, we made intercept interviews of altogether 75 visitors of different ages and different backgrounds during 3 weekends between April and June 2016. We chose to do short, situated interviews to get access to the immediate experience of the visitors, instead of using questionnaires or lengthy thematic interviews. In situated interviews the place (and time, weather and other events) of the interview plays a role in the analysis and it is expected that it has an effect on the answers. Most interviewees were between ca. 30-50 years, and a majority of the respondents were female (36/55). When adults with children were interviewed, children often answered to the questions although it was not the purpose. On average, an interview lasted about two to five minutes and we started by asking a general question, like how often do you visit the zoo, why did you come to the zoo today or have you/your children enjoyed your visit. The theme of conservation was not mentioned until the last two questions: How is conservation apparent here? Do you remember anything specific about conservation from this visit? Our secondary research material was four ethnographic visits to the zoo. We focused on the visit experience and the conservation messages, and also took some notice on other visitors nearby. We photographed especially the signs showing conservation messages. For the final report and for our other article (to be written) we will focus on the mentions in the conservation theme. For this article however we will analyse how zoos feature as urban animal encounters in our material.

*These people see zoos and its function as critical "other worlds" compared to the more natural city environments*

## Animal welfare and animal encounters

To quite many interviewees Korkeasaari Zoo is a familiar place. Many interviewees told us that they have arrived to enjoy their free time and to view mainly exotic and endangered animal species. Many visitors told that they came to see an animal individual to whom they have made a special emotional contact or a charismatic, interesting animal species (big felines, wolverine, bear, kangaroos, camel, apes, an otter etc.). What we didn't expect in the interviews, was that the visitors view both captive animals and wild animals as part of the zoo experience. The wild animals on the island, and mentioned in the interviews include sea gulls (*Larus canus*), Barnacle Geese (*Branta leucopsis*), squirrels (*Sciurus vulgaris*) and tits (*Paridae*). In June, the geese have nests by the walking paths which they protect aggressively if humans come too close. In fact, the zoo put up several warning signs to visitors that instructed what to do if geese get aggressive. The interviewees told us that children often wanted to approach and touch the geese. These encounters were used in teaching children to respect animals.

Sounds and different colours of animals also received a special attention among the visitors. They mentioned for instance the loud sound of peacock and it's colourful tail feathers. In addition, the interviewees talked a lot about animal activity, even though we didn't ask about it. Many visitors said they prefer to observe active animals such as fighting birds (geese chicks and gulls), active reactions and gestures of the apes and observe cute young animals such as bird chicks or Amur Tiger cubs (*Panthera Tigris Altaica*) that were born in spring 2016. Also, charismatic Finnish species were mentioned such as moose *(Alces alces)*, wolverine (*Gulo gulo*) and European otter (*Lutra lutra*). In this case, the parents told us that it was important to broaden children's experiences of large or predatory animals. when for instance the wolverine was viewed nearby and in a "safe "environment at the zoo. Some visitors expressed (unprompted) their views on animal captivity: twelve interviewees saw animal enclosures as versatile and good, and they stressed the naturalness of the enclosures and saw

zoo animals as having enough space in their enclosures. By contrast, seven interviewees criticized animal enclosures as too small or cramped, for example for captive birds and the Amur leopard. Some also criticised the way zoo animals are used as commercial objects or "exhibit animals". Notably mainly younger interviewees saw that zoo animals can be stressed in the zoo environment.

## Discussion

Our preliminary results show that visitors may strengthen bonds with non-human animals in a zoo environment. Zoo animals are part of urbanity and connected to people's lifeworlds. We were surprised how visitors not only enjoy their leisure time while viewing animals at the Korkeasaari Zoo but some also voiced pretty strong views and opinions on captive animals. Captive animals raised anxieties in some interviewees. These people see zoos and its function as critical "other worlds" compared to the more natural city environments. Whitworth (2012: 7) claims that, in the future, the collection and the style of both animal enclosures and zoo environments should be considered when the zoos estimate their popularity. Zoos can be seen as significant places for urban human-animal encounters especially considering the ever increasing urban population, but we recognize that there are strong ethical questions attached to keeping animals in captivity. Probably, these sentiments may continue to increase and the zoos will need to respond to increasing demands on the care of animals and to reformulate their goals and practices.

### References


Anderson, K. (1998) Animals, Science and Spectacles in the City. In. Jennifer, Wolch and Jody, Emel (eds.). *Animal Geographies, Place, Politics and Identity in the Nature-Culture Borderlands*, Verso, London. 27–54.

Anderson, K. (1995). Culture and Nature at the Adelaide zoo: at the frontiers of human geography, *Transactions of the British Geographers* 20, 275–294.

Ballantyne, R., Packer, J., Hughes, K., & Dierking, L. (2007). Conservation learning in wildlife tourism settings: Lessons from research in zoos and aquariums. Environmental Education Research 13, 367–383.

Beardworth, A. & Bryman, A. (2001). The wild animal in late modernity The case of the Disneyization of zoos, Tourist Studies 1(1), 183-104.

Bravermann, Irus (2013). Zooland, the Institution of Captivity, Stanford University Press.

Claxton, Anna, M. (2011). The potential of the human–animal relationship as an environmental enrichment for the welfare of zoo-housed animals, Applied Animal Behaviour Science 133, 1–10.

Helsingin kaupunki (2015) Korkeasaaren eläintarha. Toimintasuunnitelma 27.1.2015. http://dev.hel.fi/paatokset/media/att/f1/f15a26b29c8111014bd9507e626b88173d326017.pdf

Helsingin kaupunki (2015). Plant, mushrooms and animals. http://www.hel.fi/www/Helsinki/en/housing/nature/plants-animals/ (read 2.11.2016)

Skibins J. C. and R. B. Powell (2013). Conservation caring: measuring the influence of zoo visitors' connection to wildlife on pro-conservation behaviors. Zoo Biology 32: 528-40.

Wijeratne, A. J., Van Dijk, P. A., Kirk-Brown, A., & Frost, L. (2014). Rules of engagement: The role of emotional display rules in delivering conservation interpretation in a zoo-based tourism context. Tourism Management 42, 149-156.

Whitworth AW (2012) An Investigation into the Determining Factors of Zoo Visitor Attendances in UK Zoos. PLoS ONE 7(1): e29839.

WAZA (2015) Zoo and aquarium design. http://www.waza.org/en/site/conservation/zoo-design (read 1.11.2016)

# Giraffe™

## Animals and keepers between high nature and urban popular culture in the history of Zoological Gardens

**Wiebke Reinert**

Wiebke Reinert has been searching for guards and keepers in the stories of Zoological Gardens since 2014. Prior to that, she worked as a teaching and research assistant in the fields of history and cultural anthropology. Her most concrete interests are the history and presence of social housing, human-animal as well as urban-rural entanglements and territorial stigmatizations.

wiebke.reinert@uni-kassel.de

The Zoological Garden as a special form of modern keeping of animals is a thoroughly urban phenomenon. It can only be properly understood within the context of urban cultural practices, economies and popular amusement industry that have accompanied zoo animals' lives ever since. In mid-19th century Europe, zoos were established as bourgeois spaces in big cities and symbolized civilized distinctiveness featuring ideals of education and reasonable recreational activities. Animals were objects of scientific interest and deputies of a romanticized nature (Löfgren 1985). As Ayako Sakurai (2013: 78) has carved out, they have first and foremost been props within a "promenade with animals". The bourgeois practice of the promenade included the view as "particularly essential conversation piece" (*ibid.*: 80). Animals were meant to contribute to sociability and ease while strolling, perceived as a rather easy conversation topic, brought about by their neat *mis-en-scène*. Popular media was weaving their demeanour in familiar, accessible narratives of amusement (*ibid.*: 81).

The shift from the aristocratic menagerie to the bourgeois zoo, notwithstanding, probably consisted to a large part in transferring the luxury of keeping exotic animals from the feudal society to class society. Most stories about zoos are written on the assumption of a "fresh start" (cf. Sakurai 2013: 71) and tend to overlook and underestimate the continuity of the roles that displayed animals had played. Since its very first days, the zoo has been a stage for storytelling, and the figures of animals and keepers are crucial for the understanding of the interwoven areas of urban leisure, interpretations of nature and economic networks. To grasp the two poles of aspired educational purposes on the one hand, leisure and popular entertainment on the other, I suggest a sketch of *high nature* and popular culture. In this area of conflict, animals and keepers as well as popular narratives have transgressed the aspired order (Holmberg 2015: 2). Zookeepers are important figures in the zoo as man-made space "by which the relationship between human and the reputedly 'wild' animal is mediatized" (May 2016: 183) It is thus kind of surprising that they have not been central characters in hitherto historiographies.

### The arrival and parade of the giraffe

Zooanimals have ever since been symbolically loaded and ritually initiated into urban settings. Newly arrived animals were publicly portrayed in urban media, as contemporary popular newspapers and magazines from any given bigger city of the late 19th century give proof of. Parades of animals through locked off city streets were put on to display that a new feature had arrived. The first giraffes, as the story goes, that have reached European animal parks caused a real "craze" and "giraffe-mania" back in the 1820s (Allin 1999; Riedl-Dorn 2008). The animals did at the very least display the sound connections to aristocrats in lands far away and the wealthiness and self-confidence in handling a

delicate species such as *Giraffa camelopardis*[1] (Lebleu 2016; Loske 2015; Nicholls 2014).

To prevent the giraffe that travelled to Schönbrunn, Vienna, from getting homesick, an "Arabian guard" was hired to accompany her (Riedl-Dorn 2008: 38-89). The intimate relationship between guard/keeper and animal (in the case of the giraffes often enough exposed by contemporary drawings starring giraffe and guard from the inside of the enclosure) has been a fundamental component of introducing both the institution of the zoo and the animal other into the urban space and a bourgeois middle class *in the making*. The sentimentalized relationship also served legitimizing purposes and the imagination of encounters' conduct.

*Parades of animals through locked off city streets were put on to display that a new feature had arrived. The first giraffes caused a real craze and giraffe-mania back in the 1820s*

In 1943, Rudolf Riedtmann published a book on his experiences as guardsman in Zoological Gardens.[2] The report is a mixture of funny incidents and comical animals, dramatic occurrences (like flights, assaults or deaths of animals), and confessions of *real* love for animals – borne on traces of a patronizing know-it-all-and-better attitude of the 'insider', adding to the set of what a special and peculiar spot a Zoological Garden is. Riedtmann recounts that he usually spends New Years Eve in the giraffes barn, to "at the Christmas tree's candlelight pace over to the New Year, with the good hopes and wishes that my giraffes and I may stay together until the next New Year's Eve to come." (190) Riedtmann 'confesses' that he actually does not take much pleasure in the many visitors on sunny summer Sunday afternoons. "Hence, with these many people flooding the garden, an invisible, dividing wall pops up between animal and keeper . . . Everything becomes a performance; the animal has become a downright showpiece, together with his guard. A foreign power has squeezed in between me and my fosterling." (187). What might seem to be a counter narrative is part and confirmation of a story that essentially is about innocent harmony between man and nature. The good zoo conditions that animals live in and real, "natural" love and interest in the other constitute zoo life as set against the disgraces of metropolitan life, rationality, economic power and – if not first and foremost – the appearance and practices of "the masses" that were migrating to the city and, according to Riedtmann, also "flooding" the Zoo.

## To the masses: Popular exclusiveness

These masses though were fundamental both for the economic success and the legitimation of zoos as institutions of popular education. In turn, collecting a large variety and number of animals to settle them down in zoos, as it were, not solely served to demonstrate variation and matters of taxonomy (Benbow 2000: 14), but just as much to compete with other cultural institutions on a growing market of urban mass entertainment. Producing and distributing (in the widest sense) new animals also allowed, time and again, to display exciting stories: animals on their ways in obscure containers, moving into their new enclosures, being fed, breeding, learning tricks, playing tricks, escaping, mobbing – with varying, ferocious, funny, furry or feathered principal performers.

In 1907, it was still rare enough for certain species to breed in captivity.[3] W. Germanos reported about

1 Despite costly care and veterinary supervision, the Nubian giraffe in Schönbrunn, Vienna did not fare well in her new habitat and died only some months after her arrival. Her fellow in London stayed alive for two years.

2 Riedtmann, R., *Tiere kommen und gehen. Ein Zoowärter erzählt*, Erlenbach-Zürich: Eugen Rentsch 1943. "Guard" was the term used for those professionally taking care of animals in Zoological Gardens far into the 1950s. Whilst the German word *Pfleger* comprises *pflegen*, to take care of, *Wärter* is connected to the somewhat more technical *warten*, which might be close to "to maintain" and also connects to prison guards (*Gefängniswärter*), pointing to the imprisonment of living beings. This shift of terms tells quite a bit about the respective stories Zoological Gardens aim to tell about themselves.

3 In 2014, by contrast, the life of a giraffe of Copenhagen Zoo was concluded by a captive bold gun as a result of the Breed-

a giraffe that had been born in the Zoological Garden of Athens, Greece. Since its mother was averse to lactate, Germanos and his guards "were forced to tie her to the iron bars and rope up her feet, whereupon we put the infants head to the udder so the dam had to nurse it against her will."[4] All the same, the staff abandoned this practice and fed the young giraffe goat milk instead. Interestingly enough, the author emphasizes the sire's "ample affectionateness" in a style similar to stories on zooanimals' "family life" that appeared in light fiction. The practice of keeping and the imaginary spaces coming along, needless to say, were neither always in keeping nor free from repercussions in the magic triangle of animal, keeper and audience and production, consumption and distribution.[5]

## Repercussions

The various human-animal-relations that influence and shape the animals' lives consist of representations and everyday life that seem to be repercussive. This could be interpreted as part of various "dynamic results of social processes of discourse and interaction" (Arndt 2016: 73). In the 1960s, Zoo biologist Heini Hediger interestingly enough chose the programmatical subtitle: *Humans and animals at the zoo* for his fundamental book[6] (cf. Lestel/ Bussolini/Chrulew 2014). Zoo Director Emeritus David Hancocks pointed out that Hediger's sharp observations of human-animal-interdependencies at the site still are, regrettably enough, universally disregarded in the zoo world (Schaul 2012).

The zoo as an animal's territory "is not a generalised space on a map, but the collection of greater and lesser intensities and rhythms formed by meaningful inhabitation and activity" (Lestel et al. 2014: 143). Within the last 20 years, the narrative of species conservation has become essential part of zoos' self-concept and image campaigns. This has affected the animals' spatial presentation in so far as the idea of 'natural habitats' of the respective animal form a guideline for enclosure designs. On the other hand, these "immersion landscapes" (Hosey et al. 2009: 31f.) promote, along the same lines that guard Rudolf Riedtmann described in 1943, a view on animals and nature that is pristine and harmonic. Play and close contact between animals and keepers, however, is still popular and feeding shows are very important regular happenings at zoos. These plays are legitimized and integrated in the 'conservation' story of science and care by stating that, for example, medical examinations are more easily operated with animals accustomed to physical contact with humans.

German zoos faced a serious crisis in the 1990s. The revivification in the 2000s coincided with the launching of TV series that were especially focusing on the keeper-animal relation. One peculiar example of zoos', economy's and mass media's intersection was llama Horst, which was taken to the cinema by his keeper Michael Ernst (Elefant, Tiger & Co. 2012 (5)) to hand a sponsorship certificate to the exhibitor. The story line of warm-hearted fun and animal welfare has been rather successful. Leipzig Zoo reported that not only the number of visitors, but also that of applicants for apprenticeship positions rapidly increased after the series was assigned a prime broadcasting slot.[7]

---

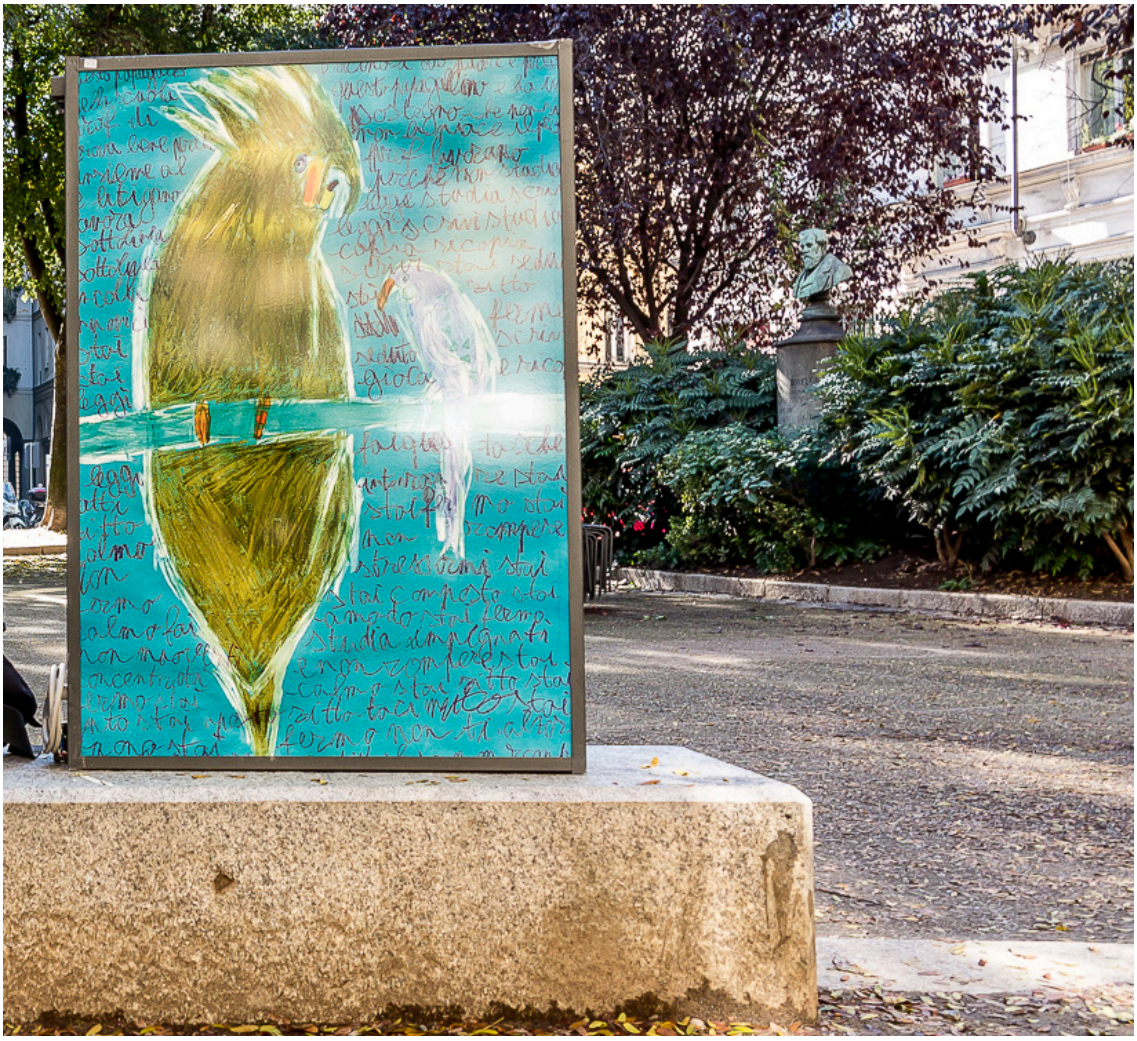
ing Programmes of the European Association of Zoos and Aquaria (EAZA).

4 Dr. W. Germanos, Geburt einer männlichen Giraffe im Zoologischen Garten zu Athen, *Der Zoologische Garten* 1907, 48.Jg., 73-75.

5 I am grateful to Kaspar Maase for pointing out this triangular relationality to me.

6 Hediger, H., *Mensch und Tier im Zoo*, Tiergarten-Biologie, Zürich 1965

7 I am very grateful to the staff department of Leipzig Zoo for granting an insight into the relevant data.



## References


Allin, M. (1998) *Zarafa. A giraffes true story from deep in Africa to the heart of Paris*, New York: Walker & Company.

Arndt, D. (2016) "Erleben Sie Tiere! Ein Essay zum Mensch-Tier-Verhältnis in der Erlebnisgesellschaft". *Tierstudien* 09 (2016), 72-81.

Atkins, P. (2012) "Introduction". *Animal Cities. Beastly Urban Histories*, Farnham/ Burlington: Ashgate, 1-17.

Benbow, S.M.P. (2000) "Zoos: Public Places to View Private Lives". *Journal of Popular Culture* 33:4 (2000), 13-23.

Elefant, Tiger & Co. Teil 5 (2012) *Das große Wiedersehen*, Leipzig: UAP.

Holmberg, Tora (2015) *Urban Animals: Crowding in Zoocities*, New York: Routledge.

Hosey, G.R., Melfi, V., Pankhurst, S. (2009) *Zoo animals. Behaviour, Management and Welfare*, Oxford & New York: Oxford University Press.

Lebleu, D. (2006) *Les avatars de Zarafa, première girafe de France. Chronique d'une girafomania, 1826-1845*, Paris: Arléa.

Lestel, D., J. Bussolini, M. Chrulew (2014) "The Phenomenology of Animal Life", *Environmental Humanities* 5 (2014), 125-148.

Löfgren, O. (1985) "Our Friends in Nature. Class and Animal Symbolism", *Ethnos* 1-2 (1985), 184-213.

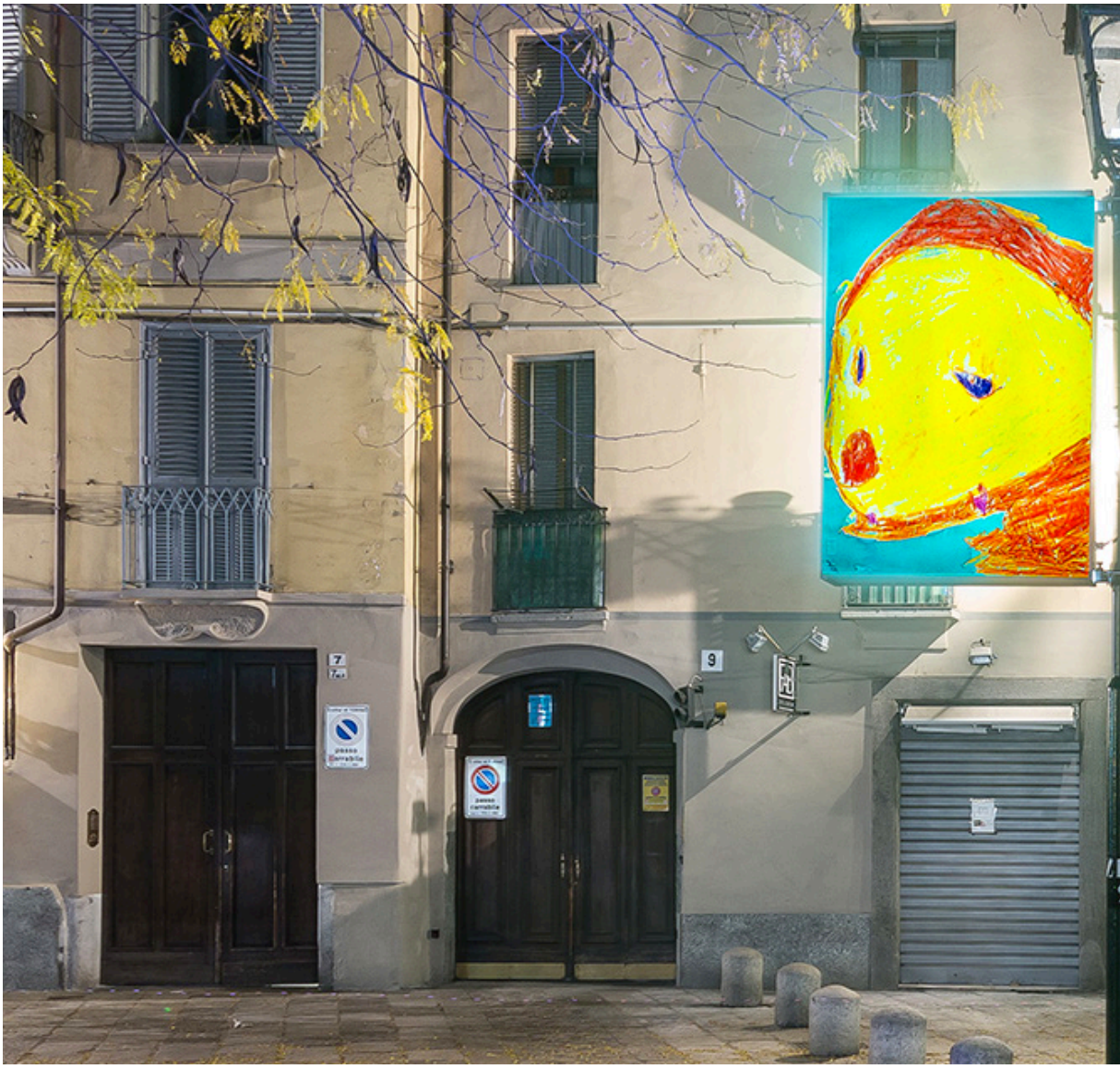
Loske, A. "Giraffemania! The live diplomatic gift that started a Georgian craze, *The Guardian* 03.11.2015, https://www.theguardian.com/science/animal-magic/2015/nov/03/gift-diplomacy-king-george-giraffe-britain-brighton-exhbition, 01.11.2016.

May, C, K. (2016) "Geschichte des Zoos". *Tiere – Kulturwissenschaftliches Handbuch*, edited by Roland Borgards. Stuttgart: J.B. Metzler 2016, 183-193.

Nicholls, H. "Meet Zarafa, the giraffe that inspired a crazy hairdo", *The Guardian* 20.01.2014, https://www.theguardian.com/science/animal-magic/2014/jan/20/zarafa-giraffe-paris-fashion, 01.11.2016.

Sakurai, A. (2013) *Science and Societies in Frankfurt am Main*, London: Pickering & Chatto.

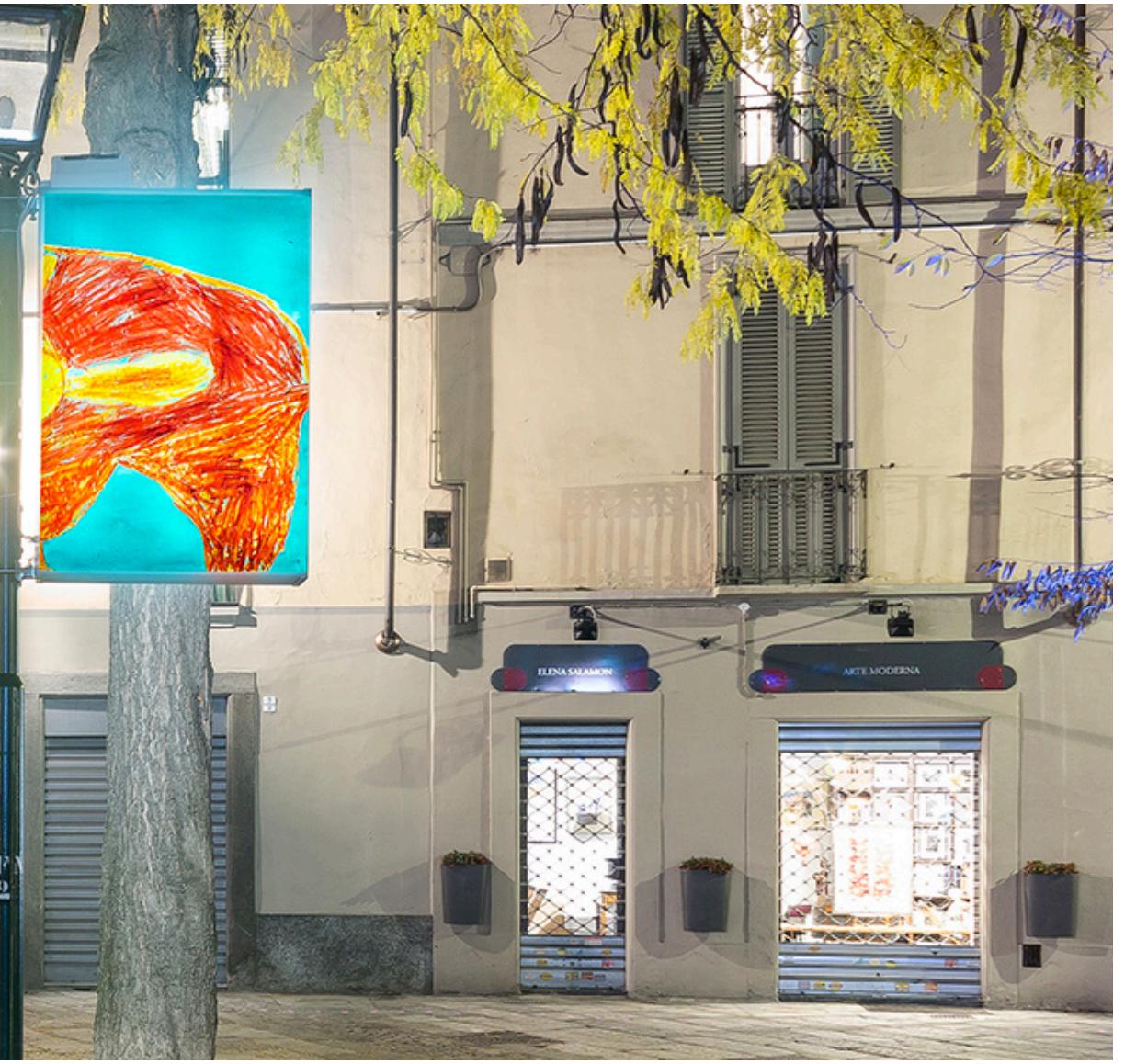
Schaul, J.C. "A Critical Look at the Future of Zoos – An Interview with David Hancocks", *National Geographic* 13.03.2012, http://voices.nationalgeographic.com/2012/03/13/39842/, 14.11.2016.



*As a visual artist, I have devoted my last 15 years of work to a permanent workshop with the children of the Neuropsychiatry Local Health Unit of Reggio Emilia, northern Italy. I started by chance, if anything like chance exists at all, and at first it even seemed a mistake to be there with those kids. Then I discovered that a 'mistake' is what these children feel to be in comparison to we, the 'normals': at school, on the bus, at birthday parties, where there are never invited... But I also learnt that mistakes allow us to build a wonderful method to redeem the poetic potential of these kids, a potential unknown to many – to me in the first place.*

*That is why we called our workshop* Atelier dell'errore, *the Atelier of Errors.*

*At the atelier, we have always and only drawn animals – animals no one has ever seen, animals that, contrary to their often fierce and aggressive look (it's just shyness and self-defence, say the kids at our workshop), are in fact docile. With patience, and thanks to a long-term commitment, these animals carry with them many of the problems of these kids; they can heal those problems,*

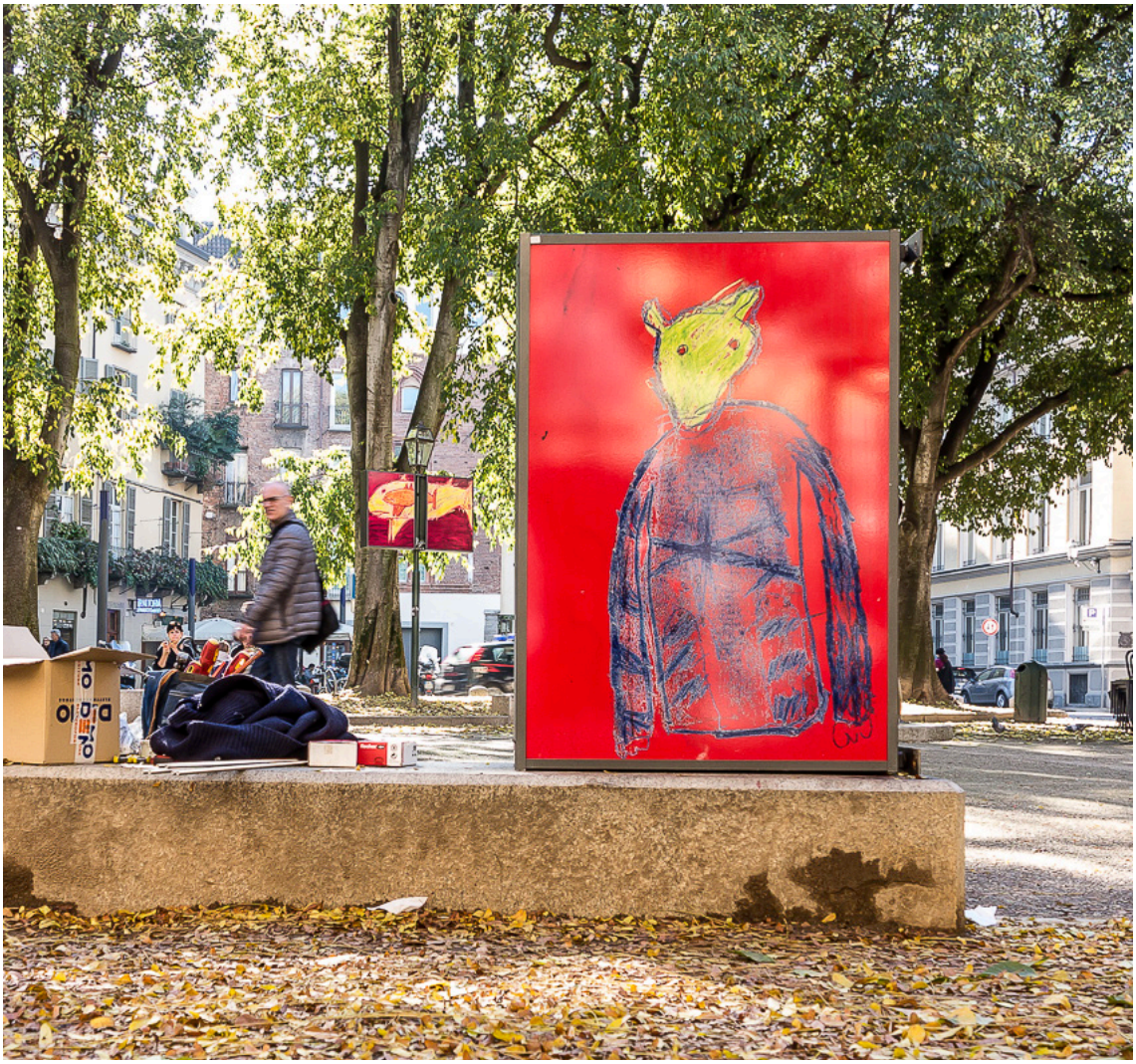



*at least for a while – to the great relief of us all. In the years of its activity, Atelier dell'errore has flanked and complemented the clinical activity of the Unit of Child Neuropsychiatry, but has also developed into an interactive artwork that has participated in numerous contemporary art exhibitions and art events in Italy and beyond.*

*Luca Santiago Mora*

*www.atelierdellerrore.org*

*The project hosted in these pages is* Lo zoo di luce va in città *[The lighting zoo goes to the city] presented at Luci d'Artista, Torino, 2015. See also the book edited by Marco Belpoliti,* Prophet Zoological Atlas *(Published by Corraini)*



# Re-Placing Coyote

**Shelley M. Alexander**
**Victoria M. Lukasik**

> *It's OK for them [coyotes] to kill a rabbit out in the wild, but we shouldn't have to watch that in the city (Alexander's fieldnotes)*

Our human relationship with coyote is old, sometimes magical but lately polarized and complex. Archeological evidence shows coyote (*Canis latrans*) displayed ubiquitous distribution across the continent for over 1 million years (Wang, Tedford & Antón, 2010). Through this, coyote has witnessed the rise and fall of iconic species, such as the woolly mammoth (*Mammuthus primigenius*), dire wolf (*C. dirus*), among others that migrated to this continent during the Pleistocene ice age (Wang, Tedford & Antón, 2010). Given human tenure on the North American continent is commonly believed to be less than 15,000 years, it is not surprising that coyote holds a pivotal and revered, magical role in many aboriginal stories: Coyote is creator, trickster, and shape-shifter (Alexander & Quinn, 2012).

Despite great importance to these early cultures, coyotes were subsequently persecuted by European settlers from the mid-1800s onwards (Alexander, 2015). In fact, the species was systematically killed alongside many other carnivores to make way for land cultivation and stock production. Today, there are few wild animals that polarize Canadians like coyotes (Alexander & Quinn, 2011). People love coyotes, but people also kill coyotes – sometimes in unthinkable ways.

As North America's most persecuted carnivore, coyotes are poisoned, trapped, shot, and wounded at an alarming rate. Culls (i.e., killing indiscriminately in very large numbers) remain commonplace. This "killing paradigm" exists in part because it is an "easy" solution with deep enduring roots. Generally argued to be necessary on human safety, subsistence and economic grounds, such culls are expensive, lack widespread support by North American citizens, are not effective for conflict resolution, and have been argued to be ecologically destructive (Bekoff & Bexell, 2010; Berger et al., 2006; Gehrt, 2004; McManus et al., 2014). To illustrate the scale of the issue in Canada: In 2009, a government-sanctioned bounty in the province of Saskatchewan resulted in 70,000 coyotes being killed in one year alone and at a cost to taxpayers of CND$1.4 million (Alexander & Quinn, 2011). Likewise, in the US, over 500,000 coyotes are killed annually in that country, amounting to the death of one-coyote-per-minute (Fox & Papouchis, 2005).

Shelley M. Alexander is a Full Professor in the Department of Geography, University of Calgary. She presently is the founder and lead scientist of the SSHRC funded Foothills Coyote Initiative (2015-2019), a project exploring situational factors governing human-coyote relationships in peri-urban and agricultural lands near Calgary, Alberta. Shelley has 25 years experience studying wild canids, has worked with captive wolves and coyotes, and is an expert in Wildlife Conservation GIS (GIS, Satellite imagery & statistics) and Landscape/Road Ecology.

Victoria Lukasik is a PhD Candidate at the University of Calgary, Canada. Her research interests are varied but focus predominantly on large carnivore ecology and human-wildlife interactions from a socio-ecological perspective, particularly human-wildlife conflict mitigation. Her current research examines the attitudes, perceptions, and politics influencing large carnivore management in western Canada.

www.ucaglary.ca/canid-lab

## Challenging Human 'Places'

Our contemporary relationship with coyote is made more challenging because they have learned to live among us in ways that North American's early colonists could never have imagined. The adaptive resilience conferred through millennia (Wang, Tedford & Antón, 2010) makes them able to exploit many habitats, including cities. While they persist in the city, many coyotes do not thrive in the city – not unlike that of a human forced to live on the street. And, sadly, when confronted with regular human food attractants, individual coyote behavior may change; they can become food conditioned, and may then act aggressively towards people (Fox & Papouchis, 2005).

*Our contemporary relationship with coyote is made more challenging because they have learned to live among us in ways that North American's early colonists could never have imagined*

This leads inevitably to the question: "Do coyotes or other carnivores belong in cities?" Embracing life with carnivores in our urban "places" is going to take a paradigm shift – a "re-wilding" of cities (Emel, Wilbert & Wolch, 2002). For coyotes, we argue this re-wilding will require "re-placing" them in our collective conscience that defines what species belong where and what behaviors of wild species are appropriate in cities. Based on our joint experience studying coyotes, we are not naïve about the challenges such a dream presents. We understand that this will require renegotiating ideas such as humans having pre-eminent importance in urban settings – humans must place other species in more equitable standing with ourselves, and re-envision our expectations, ethics, and politics that entrain the urban spaces we live in. Understanding the unspoken rules of our animal constructs might help people begin to untangle the problem and find solutions.

One such construct is presented by Philo and Wilbert (2000), who describe people's relationship to animals through "zones of human settlement". Here, specific animals are expected to occur or "belong" in very particular places (n.b., we believe these are largely implicit beliefs surrounding coyotes). With this notion, cities are the correct place for people and their dogs, cats or other animals residing in home, while agricultural and livestock occur around the city perimeter, and wild animals like coyotes – they are to live in the hinterland far away from the urban centre. But coyote confronts that ordered classification by choosing to live in cities and sometimes eating domestic animals or, albeit rare, attacking people. Our coyote research findings show support for this idea, as people expressed to the media they believe coyotes living, hunting, killing or eating in cities have acted in an "un-natural way" (Alexander & Quinn, 2012; Lukasik & Alexander, 2011).

Extending ideas of "place", we believe that even though humans have converted native coyote habitat into residential developments and displaced the animals, when a coyote returns or exploits these built spaces (that embody constructed rules defining them as human places), it is often considered by people to be "out of place". More subtly, there appears to be an assumption that coyote aggression towards pets and people (i.e. attacks) is deliberate or wrong (even criminal) (Alexander & Quinn, 2011). Yet, aggression (in almost any animal) is an evolved trait that confers survival. The unwillingness of people to tolerate certain levels of aggressive behavior in coyotes results in routine execution of these animals.

Finally, whether acknowledged or not, human and domestic animal experience takes precedence over wildlife experience in the city. Previous research shows that wildlife managers in Canada "remove" coyotes that attacks a person (Alexander & Quinn, 2011) and we have observed that coyotes who attack dogs are often flagged for removal. Despite the fact that an analysis of the wounds inflicted by coyotes during such altercations with dogs mimic territorial fights between coyotes, and

so suggest coyotes are protecting themselves from invading dogs – deliberately attacking all dogs as prey. Killing to solve conflict remains firmly entrenched in North American management, despite having been shown for years to be ecologically destructive and ineffective.

Killing indiscriminately has been shown to result in a younger and younger population of coyotes, the breakdown of social structure, loss of cross-generational teaching and finally more attacks on people, pets and livestock (Crabtree & Sheldon, 1998; Fox & Papouchis 2005; Shivik, Treves & Callahan 2003; Treves & Naughton-Treves, 2005), even if it does address human's perceived notions that coyotes are dangerous and risky to live with. Importantly, this perceived risk may be unfounded. Alexander and Quinn (2011) found that, fewer that 3 people are bitten or scratched each year in Canada (Alexander & Quinn, 2011). So, despite the fact that attacks on people or the loss of domestic animals has tangible emotional and economic effects (Treves & Bruskotter, 2014), and evoke grief, anger, and fear in victims (Alexander & Quinn, 2011), it is difficult to reconcile the killing of coyotes to abate risk of human or pet injury.

## Implications of Urban Coyote Diet

Having survived a million years on one continent and the arrival of mega-fauna during the Pleistoscene, coyotes developed an acute ability to adapt by modifying feeding and breeding behavior. They are highly plastic and can eat almost anything, and repopulate quickly during times of high mortality (Lukasik & Alexander, 2012). Coyotes also can be keystone predators and therefore have a large effect relative to their numbers across the food chain (Crooks & Soule, 1999). They can regulate other species (e.g., white-tailed deer, *Odocoileus virginianus*, Canada geese, *Branta canadensis*, small rodents like ground squirrels, *Spermophilus* spp.) that otherwise overpopulate urban and rural areas, potentially costing crop growers millions of dollars.

Clearly, theories of trophic (food chain) cascades and keystone species (Estes et al., 1996) are important considerations about the role of coyotes in cities and the need to maintain their populations. Also critical, coyote's high adaptability means they can also feed on human garbage or pets. In fact, the availability of such attractants can help them overcome periods of scarcity and promote higher population densities in some areas. However, as the consumption of human source foods can result in food conditioning and habituation, the species can also quickly lose their fear of people (Gehrt, 2004), which in turn may increase the frequency and amplitude of conflict or attacks (Alexander & Quinn, 2012).

Although coyotes in Calgary consume a mostly natural diet of small mammals, fruit and other vegetation, we found that 1 in 6 scats contained human food (e.g. bird seed, crabapples, *Malus* spp., and garbage), which may be cause for concern (Lukasik & Alexander, 2011). Minimizing conflict with urban coyotes (along with other carnivores) most certainly will require reducing access to such attractants. It may be also be wise to implement policy or law requiring the removal of attractants (i.e. even planted trees).

Climatic regimes may also be implicated in conflict with coyotes, as it can impact food availability (Crooks & Soule, 1999). In previous regional research, we observed Saskatoon berries (*Amelanchier alnifolia*) to be a critical part of urban coyote diet in 2006 (Lukasik & Alexander, 2012), but in 2009 the plant was almost absent in coyote scat (Fortin-McCuaig, 2012). We later found that an early spring frost in 2009 resulted in the collapse of the Saskatoon berry crop. Coyotes ate more garbage in that year (Fortin-McCuaig, 2012), so it is possible this was a result of the reduced availability of berries. Understanding and acknowledging larger climatic and ecological regimes that are not directly relevant to the day to day experience of people, and determining the implication for urban wildlife will be critical to maintaining positive relationships.

## Re-placing Coyotes?

If we hope to co-flourish with coyotes, it will be up to humans to change our collective behaviors and become willing to share our space with coyote and others. Unfortunately, this might be tough to realize. Our research to date has shown a dissonance in human's choices to move towards "greener cities" (Alexander & Draper, personal communication, 2016). While some people desire green spaces in order to experience nature, many of those same individuals do not welcome coyotes – describing their presence at times as "un-natural" (Alexander & Quinn, 2011).

More critically, wild behavior is misunderstood and portrayed as incorrect because of the "place" it is happening. To change, we will have to answer tough questions, such as: Which behaviors and species are we willing to tolerate in the city? Are we willing to accept that when my domestic animals wanders at large outside my house it is prey and part of the ecosystem? Who should decides this? Our existing ethical frameworks do not appear adequate to answer these questions – we likely need to refurbish them.

In tandem with natural causes of landscape change by people, or fragmentation (Forman & Godron, 1986; Turner, 2005), urban design affects wildlife and biodiversity. We need to better understand the consequences of our design and where coyotes can be placed in that schema. For example, what do large right-of-ways next to roads do to small mammal density (given the habitat it creates is good for them), or what happens to den site habitat for a species like coyote that is legally designated a pest? And, how are all these changes implicated in the species' quality of life, or the maintenance of biodiversity? And, if we have altered the habitat and created an urban dependent coyote – are we then beholden to protect that animal?

It is increasingly apparent that a positive shared future requires understanding coyote ecology as well as human attitudes, beliefs and behavior towards the species (Treves & Bruskotter, 2014). Alexander and Draper (personal communication, 2016) are addressing some of these deficiencies in a new study evaluating human dimensions of coyote encounters in urban and peri-urban landscapes. We challenge readers, managers, and scientists to envision the mechanisms and practices by which we all benefit or co-flourish (not simply co-exist in space).

We have argued that challenges to co-flourishing are founded on often unarticulated or disregarded concepts of place, which can then inform our beliefs and behaviours towards coyotes. Moreover, the de-facto use of killing as a management tool needs scrutiny based on the available science and multiple public's experiences. Changing this paradigm will likely require recasting laws that govern how we are allowed to relate to wildlife (in particular laws that designate species as pests need scrutiny and revision - placing species like coyotes into a contemporary context of it's role in ecosystems).

To truly recognize our ideal of "re-placing" coyotes (and any other wild animals) in the city, we know people will need to dream big. We need to reconcile that we have borrowed habitat from our wild counterparts – maybe even acknowledging that, based on our short tenure here, we are living (and perhaps only temporarily) on a Coyote Continent. In turn, this may require accepting we and our pets are part of, and not the most important thing in coyote's world. We know people and coyotes can co-flourish. The choice is up to us.

## References


Alexander, S. M., & Quinn, M. S. (2011). Coyote (*Canis latrans*) interactions with humans and pets reported in the Canadian print media (1995–2010). *Human Dimensions of Wildlife, 16*(5), 345-359. doi:10.1080/10871209.2011.599050

Alexander, S. M., & Quinn, M. S. (2012). Portrayal of interactions between humans and coyotes (*Canis latrans*): Content analysis of Canadian print media (1998-2010). *Cities and the Environment (CATE), 4*(1), Article 9.

Bekoff, M., & Bexell, S. M. (2010). Ignoring Nature: Why we do it, the dire consequences, and the need for a paradigm shift to save animals, habitats, and ourselves. *Human Ecology Review, 17*(1), 70-74.

Berger, K. M. (2006). Carnivore/Livestock Conflicts: Effects of Subsidized Predator Control and Economic Correlates on the Sheep Industry. *Conservation Biology, 20*(3), 751-761.

Crabtree, R. L., & Sheldon, J. (1999). Coyote and canid coexistence in Yellowstone. In T. Clark, A. P. Curlee, S. Minsta, & P. Kareiva (Eds.), *Carnivores in Ecosystems: The Yellowstone Experiences* (pp. 127-163). New Haven, CT: Yale University Press.

Crooks, K. R., & Soulé, M. E. (1999). Mesopredator release and avifaunal extinctions in a fragmented system. *Nature, 400*(6744), 563-566.

Emel, J., Wilbert, C., & Wolch, J. (2002). Animal Geographies. *Society & Animals, 10*(4), 407-412.

Estes, J. A. (1996). Predators and ecosystem management. *Wildlife Society Bulletin, 24*, 390-396.

Fortin-McCuaig, M. (2012). *Spatial and Seasonal Differences in the Diets of Urban and Rural Coyote (Canis latrans) in the Calgary, AB Vicinity.* (MSc), University of Calgary.

Forman, R. T. T., & Godron, M. (1986). *Landscape Ecology*. New York, NY: John Wiley & Sons.

Fox, C. H., & Papouchis, C. M. (2005). *Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore* (K. Hirsch & G. Lamont Eds.). Sacramento, CA: Animal Protection Institute.

Gehrt, S. (2004). Ecology and management of striped skunks, raccoons, and coyotes in urban landscapes. *Predators and people: from conflict to conservation (N. Fascione, A. Delach, and M. Smith, eds.). Island Press, Washington, DC*, 81-104.

Lukasik, V. M., & Alexander, S. M. (2011). Human–coyote interactions in Calgary, Alberta. *Human Dimensions of Wildlife, 16*(2), 114-127. doi:10.1080/10871209.2011.544014

Lukasik, V. M., & Alexander, S. M. (2012). Spatial and temporal variation of coyote (*Canis latrans*) diet in Calgary, Alberta. *Cities and the Environment (CATE), 4*(1), Article 8.

McManus, J. S., Dickman, A. J., Gaynor, D., Smutts, B. H., & McDonald, D. W. (2014). Dead or alive? Comparing costs and benefits of lethal and non-lethal human-wildlife conflict mitigation on livestock farms. *ORYX, 49*(4), 687-695.

Philo, C., & Wilbert, C. (Eds.). (2000). *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations*. London: Routledge.

Shivik, J. A., Treves, A., & Callahan, P. (2003). Nonlethal techniques for managing predation. *Conservation Biology, 17*(6), 1531-1537

Treves, A., & Bruskotter, J. (2014). Tolerance for predatory wildlife. *Science, 344*, 476-477.

Treves, A., & Naughton-Treves, L. (2005). Evaluating lethal control in the management of human-wildlife conflict. In R. Woodroffe, S. Thirgood, & A. Rabinowitz (Eds.), *People and Wildlife: Conflict or Coexistence?* (pp. 86-106): Cambridge University Press.

Turner, M. G. (2005). Landscape ecology: What is the state of the science? *Annual Review of Ecology, Evolution, and Systematics, 36*, 319-344.

Wang, X., Tedford, R. H., & Antón, M. (2010). *Dogs: Their Fossil Relatives and Evolutionary History*: Columbia University Press.


P

# Humans and Animals in Urban Jungles

**Basak Tanulku**

This piece focuses on urban animals through my personal observations and experiences of different urban landscapes. While humans present themselves as the actors who decide which animals to domesticate, cull, kill, eat and love, I will demonstrate that animals, either pets, strays, pests, victims or wild, are active actors who shape the urban landscape and culture. I will also demonstrate that there has always been a creation of borders between human and non-human (more than animal), and wild and civilised. Although I live in Istanbul, a city characterised by stray animals, I had not given much thought to them until I moved to England in 2004. When my eyes could not see any stray animals in the streets there, I retrospectively thought how lucky I'd been in Istanbul.[1] Cats sleep on or under a car, look for food in bins, beg for food around cafés, or even wait for the green light with other pedestrians. Especially children and homeless people who live on the streets establish strong bonds with dogs, sometimes to survive in the violent streets of major Turkish cities. In Turkey, the existence of stray animals traces back to the Byzantine and Ottoman Empires. Indeed, it is believed that dogs came to Istanbul and other Anatolian cities with the conquest of Istanbul and Anatolia by the Turks, while cats date back to the Byzantium Empire, originating from the Middle East.[2]

The cities in Turkey are sites of various conflicts between different actors and interests. Animals also play a central part in these: for some, particularly for animal rights activists, they are essential actors, for others they belong to the past and should be banned.[3] The conflict around strays goes back to

Basak Tanulku obtained a PhD degree in Sociology from Lancaster University with a dissertation on Gated Communities in Istanbul (2010). Tanulku is particularly interested in urban sociology, socio-spatial fragmentation, gated communities, activism, and the relation between space and identity. Tanulku also has an interest on the relationship between humans and animals, the protection of cultural heritage and gender issues. She wrote various pieces for blogs and web pages and published articles in various peer-reviews journals, such as *Geoforum*, *Housing Studies* and *Journal of Cultural Geography*.

tanulkub@gmail.com

1 By stray animal, I mean an animal that lives and dies in the streets (abandoned pets who live in streets can also be included in this definition). There are not accurate numbers on the number of stray dogs and cats in Istanbul; however, an estimate by the Istanbul Metropolitan Municipality's Veterinary Services Directorate place them at 250,000, while Istanbul's Chamber of Veterinary Surgeons argues that there are around 300,000 dogs and more than 700,000 cats in Istanbul. http://www.hurriyetdailynews.com/battle-to-care-for-istanbuls-stray-animals.continues.aspx?PageID=238&NID=97951&NewsCatID=341

2 For information on the dogs of Istanbul, see Catherine Pinguet's *Istanbul'un Köpekleri* (Dogs of Istanbul), Turkish translation published in 2009 (original title *Les Chiens d'Istanbul*). A different view comes from Schick who argues that dogs originated from the Near East, while there were already around 50,000 dogs in Istanbul at the time of its conquest by the Turks in the 15th century (Schick, 2010).

3 The perception of strays in Turkey is associated with several factors: as example, in the context of modernist urbanism, strays might be seen as pests, who carry diseases and bring chaos to the city and should be removed. Traditionally, while cats are regarded as sacred by the Turkish people, as a result of Prophet Mohammed's affection for them, the perception of dogs is polarised: for some, they are unclean animals, for the others, they are sacred, since the wolf, ancestor of the dog, was dear to ancient Turkic clans. The increase in the number of strays can also be related to certain social or economic factors, such as economic crises or disasters or death of their owners when more pets are abandoned or lost becoming "strays". "Animal rights/love" has also cultural, class and connotations: it is usually a concern of urban educated middle classes who organise through social media to deal with the issues of abandoned dogs by adopting them, providing food, shelter for strays and their neutering and vaccination etc. Women play also a crucial role in the promotion of animal rights in Turkey,

the modernisation efforts by the Ottoman rulers, who aimed at collecting stray dogs in Istanbul, the capital city of the Empire (Acarer, 2014; Schick, 2010).[4] The control of urban animals is still an important concern in the management of cities in Turkey, and the debate is heated about the proper ways of controlling them – through medical intervention (neutering and vaccination), through sheltering, or through killing (poisoning). This topic becomes more important during the Eid al-Adha, which enhances the conflict between people who would like to practice the old Islamic tradition of sacrifice in cities and those against it in the name of animal rights and the expectations of living in modern and clean cities. During this period, news about the abuse of sacrificial animals and about 'humane' slaughtering are covered in the media. Nevertheless, there has also been an increasing awareness of animal rights in Turkey as a result of similar global concerns in the media. Many shelters made of carton boxes for cats and dogs as well as plastic bowls for water and food can be found all over Turkish cities. Urban animals have also begun to gain identity and even cult status, as for instance the case of Tombili, the cat for whom a statue was erected on World Animal Day on October 4.

My first visit to England brought me to Lancaster. While there were no stray cat or dogs, pet animals could be seen around, either solo or with their humans. Lancaster could also be regarded as a town with rural characteristics: there were crop fields, and farms with many cows, horses, pigs, ducks and geese, grazing freely in the surrounding areas. It was also close to several national parks and Areas of Outstanding National Beauty (AONBs), which were good places for outdoor activities and leisure but lacked wild animals such as wolves, bears and lynxes. I could only encounter wild animals in few protected zones such as sanctuaries, mainly boars and during some quiet mornings, deer on the campus. While I was living in Lancaster, I also learnt about a human-introduced disease to fight increasing numbers of rabbits and hares, the myxomatosis virus, which would infect and kill them within two weeks.

After Lancaster, I started to spend time in other British cities, such as Manchester, Liverpool, as well as London, Glasgow and Edinburgh. Despite diverse histories, demographics, sizes and densities of these cities, I haven't seen any strays there. The lack of strays in Lancaster and other British cities made me think about the different meanings of animals and the changed nature of modern cities. Modernity, through medical means, has institutionalised and monitored animals. They have started to be kept behind closed doors, houses, and shelters, treated in vet clinics and buried in pet cemeteries. While cities were cleaned off of strays, pet animals have become our dependents or children-like creatures who need help and affection. They also create an enormous economy ranging from pet shops, health and shelter facilities, food and toys.[5] Modern cities have been adapted to them, through animal-friendly places – hotels, pubs, bars, hotels, bed and breakfasts and even offices. The presence of animals in cities has also become contentious, with movements reclaiming and defending their rights.[6] As seen in Lancaster and other British cities, modernity has meant rules and well-structured

---

as a result of their social positions (as mothers who are regarded as more sensible). However, it cannot be concluded that the educated middle (and upper classes) are more careful towards animals' rights. Rather, it is widely reported in the media (both social and mass) that pets are abandoned after the holiday season at the end of summers, a concern of particularly summer resorts of coastal Turkey. This demonstrates that how summer resorts, usually inhabited by the upper and/or middle classes, can reflect animal neglect. For a recent piece which discusses the stray dogs of Turkey, please see http://www.al-monitor.com/pulse/originals/2016/03/turkey-why-dogs-commit-suicide.html

4 Modernisation seems as the primary factor in the removal of stray dogs in Istanbul during Ottoman Empire. However, as argued by Schick, there are other factors to consider: While in the past, stray dogs were seen as useful creatures who cleaned streets and protected neighbourhoods, with the development of trade and changes in lifestyles, people started to see stray dogs as unnecessary or causing nuisance which led to the efforts to remove them from Istanbul's urban space (Schick, 2010).

5 According to the numbers provided by the Pet Food Manufacturers' Association (PFMA), there are 8.5 million dogs and 7.5 million cats living as pets in the United Kingdom. http://www.pfma.org.uk/pet-population-2016

6 The rise of animal rights demonstrates a shift from a paradigm which takes the human as the main centre and actor into

infrastructures to define clear borders between the city and the country and the human and the non-human.

However, at present new challenges about the meaning and limits of the urban have arisen as a result of the increasing intrusion of wild animals into cities. The sightings of wild animals in British cities has recently increased: foxes, boars, and deer have started to roam freely during the night to find food. Vacant buildings have become shelters for bats.[7] Attacks on people by wild animals have also been reported. The same thing happened in Istanbul, as a result of overurbanisation that has reduced wildlife habitat: wild boars have been noticed in residential areas on the Bosporus trying to swim to the other side of the channel, escaping from the heavy construction industry taking place in the northern forests of Turkey. As a result of the decline in natural habitats, cities will predictably increasingly host wild animals and will become their new habitat. These encounters in cities can lead us to rethink the framing of animals as pets, pests, wild and domesticated. While in cities the distance between humans and animals will decrease, the need to draw boundaries between human and non-human, as well as between the city and countryside, might be much needed. In a world where the majority of humanity lives in cities, where will run the new "wolf borders" (Hall, 2015) separating us from the wild?[8] Will cities, instead of forests, become the new jungle of coexisting humans and non-humans where cooperation and survival struggle will occur?[9]

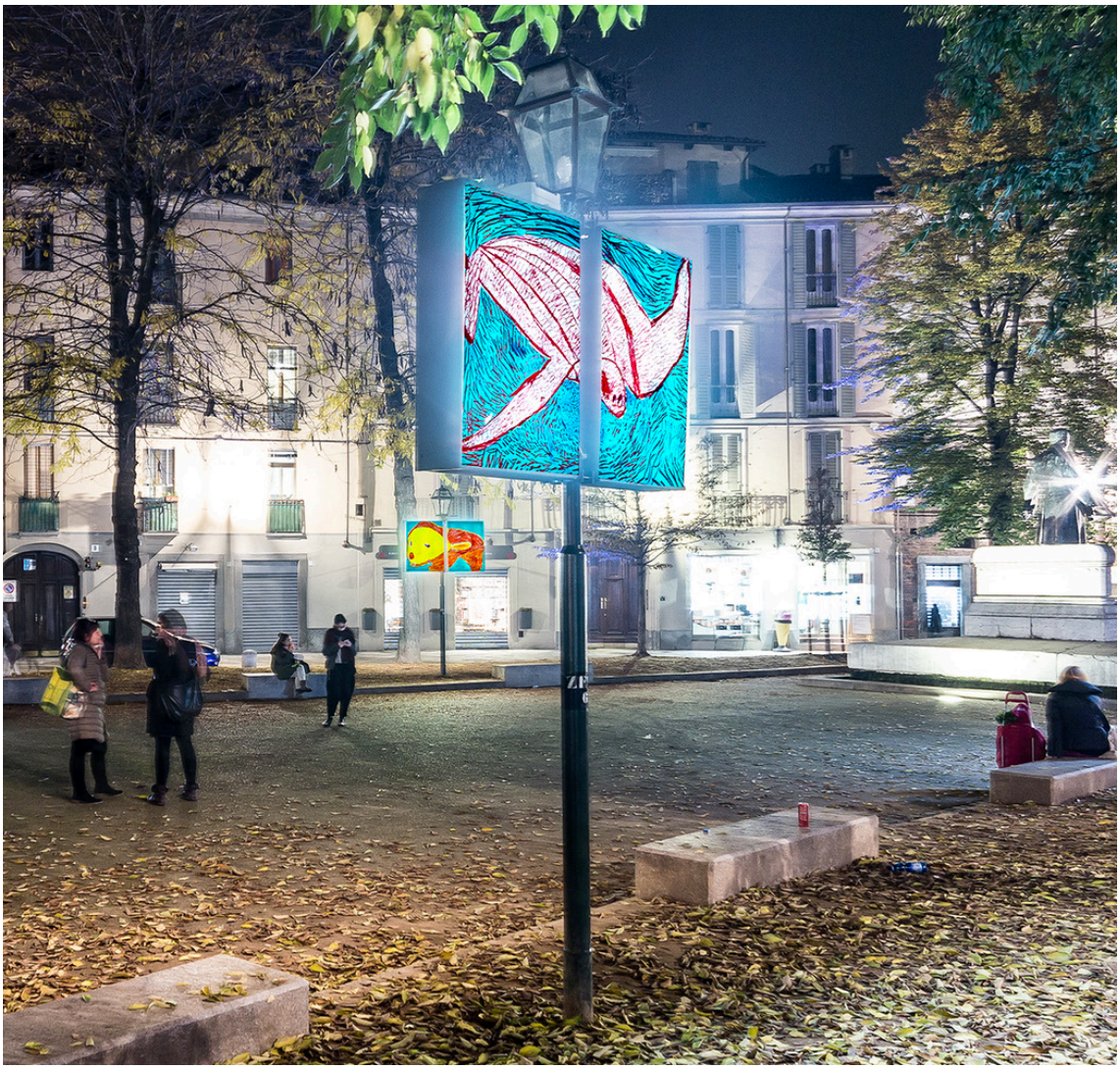
---

a paradigm which considers humans as one of the actors among many others, including animals. While in the former, everything has a specific place and well-defined status including animals, at the current times, borders have become blurred. This shift corresponds to the great changes in economic, social and political realms in the last forty years. Social sciences also got their share of such a change. There have emerged new approaches, methods and fields of study with the introduction of gender, race, environment and animal studies. Actor Network Theory (ANT) is a popular approach and method of study which is based on similar principles and considers humans, non-humans and machines as having the same role in a network.

7 For more information on wild animals in cities, see Tristan Donovan's "Feral Cities: Adventures with Animals in the Urban Jungle" (2015) and see David Goode's "Nature in Town and Cities" (2014). There are also efforts to make London a national park. If the proposal would be accepted, London will be the world's first national park city, cohabited by both humans and nonhumans http://www.nationalparkcity.london

8 Wolf border" is the title of the latest novel of British writer Sarah Hall published in 2015. The "wolf border" refers to the border between the human world and that of the wolves, where wilderness and unknown reign. The novel is set in the Lake District, a national park which is valued both for its natural beauties and cultural association, particularly with literature. The story is about the introduction of wolves into the region, while the female protagonist, who can be regarded as a lone female wolf, learns to become "tamed" after learning that she is pregnant. The novel is about being tamed through mother-hood, while a beautiful but manicured landscape returns to wilderness again through the introduction of wolves.

9 Jennifer Wolch also proposed the concept of "zoopolis" which is a sustainable city inhabited by both humans and animals, having equal status and right to the city (1998).



## References


Acarer, E. (2014) *%100 Istanbul: Tarih, Mekan ve Sırlar* [*%100 Istanbul: History, Space and Secrets*], Istanbul: Inkılap Yayınları.

Donovan, T. (2015) *Feral Cities: Adventures with the Animals in the Urban Jungle*, Chicago: Chicago Review Press.

Goode, D. (2014) *Nature in Towns and Cities*, London: Harpers Collins Publishers Limited.

Hall, S. (2015) *Wolf Border*, London: Faber & Faber.

Pinguet, C. (2009) *Istanbul'un Köpekleri* [*Dogs of Istanbul*], translated by: Saaadet Özen, Istanbul: Yapı Kredi Yayınları.

Schick, I. C. (2010) Istanbul'da 1910' da Gerçekleşen Büyük Köpek İtlafı: Bir Mekan üzerinde Çekişme Vakası [The Great Dog Massacre of 1910 in Istanbul: A Case of Conflict over Space], *Toplumsal Tarih*, pp. 22-33.

Wolch, J. (1998) "Zoopolis", in *Animal Geographies: Place, Politics and Identity in the Nature-Culture Borderlands*, J. Wolch and J. Emel (eds.), 119-138, London and New York: Verso Books.

# The End of the City and the Last Man
# Urban Animals and the Law

**Yoriko Otomo**

Most laws that mention animals (for example those relating to welfare and vivisection) are regional or national, rather than municipal. Those kinds of laws, in any case, afford animals every right except for those that are meaningful: the right to live; the right to freedom of movement; to family life; to privacy, and the right to choose the conditions of one's death. Where international obligations accrue (for example those relating to the trade, transport, sanitation and conservation of animals and animal parts) they are implemented in the countryside and at the border. There is very little law relating to urban animals, since apart from humans there are in fact very few such creatures who inhabit that jurisdictional site.

This in itself is, of course, no accident. Indeed, if we begin to think about law and the *absence* of urban animals, or of law and the urban and the absence of animals, or even of the law and its production of *lawful* animals, we are overwhelmed by the evidence of what John Berger calls 'the loneliness of man as a species'.[1] For to think about law, animals and the city without romanticising that relation is to understand that in many ways the city – emptied of non-human life – is the crowning glory of the modern state: in this, sovereign law has had a formative hand. We imagine ourselves, after all, to be the supreme beings on this earth, and we know this because the city detaches us from the earth and the air with its layers of concrete and glass and steel. We know this because the physical and visual distance from the earth allows us to appreciate its beauty, and through this appreciation, develop our own sensibility to further mark our distinction from the animal. The animal – its smells, movement, tracks, gaze, danger and warmth – is not only absent from the city, but defines it. Our fantasy of wild animals – particularly in relation to the city, then, is best described again by Berger – as 'an ideal internalized as a feeling surrounding a repressed desire. The image of a wild animal becomes the starting-point of a daydream: a point from which the daydreamer departs with his back turned'.[2] How, then, I wonder, do these images of ideal animals manifest? What is this repressed desire that we hold so dear? And where might we find the imprint of this sovereign hand?

I will look in the cities I have known, starting in England. It is here, as Raymond Williams reminds us, that an urban economy determined and was determined by what was made to happen in the 'country'; first the local hinterland and then the vast regions beyond it, in other people's lands'.[3] A dense legal infrastructure in shipping, banking and insurance – maintained in the city of London – was necessary for enabling the imperial project that was the consumption of nature and its transformation into concrete and capital. To take a walk through this city – any city – is to take a walk through

Dr Yoriko Otomo is a Lecturer in Law at SOAS where she teaches Law & Nature, and was recently a Visiting Fellow at the Oxford Centre for Global History, University of Oxford and at the University of New South Wales. She received her BA/LLB (Hons) from the University of Melbourne. Her recent book, *Unconditional Life: The International Law Settlement* was published by OUP and she has written various articles on environmental law history and animal law.

yo4@soas.ac.uk

1 *Why Look at Animals?* (2009) 15.
2 *Ibid*., 27.
3 *The Country and the City* (2011)279.

global history, and in London a new horizon has emerged the victor. Its skyline is that of a carnival, with a giant Ferris wheel, a pendulous gherkin (St Mary Axe) and sliding bridges. Its glassy towers reflect the clouds, making a strangely transparent but entirely visible utopia. Heraldic lions and sacrificial warhorses tower across boulevards; there is a rumour of foxes. Here, penance has always been paid in the drinking houses, while the docks fill with slaves, skins and ivory from other lands.

The M2 from London to Canterbury is littered with corpses, framed by a thin screen of verdant oaks. The badgers, deer, kites, hares, pigeons and pheasants were racing the entropic city.

*To think about law, animals and the city without romanticising that relation is to understand that in many ways the city – emptied of non-human life – is the crowning glory of the modern state*

Canterbury is a tiny medieval place in the south east of England; cobbled and enclosed in a Norman wall; its cathedral sitting atop Roman bones. We live here, my small son and I, next to the river Stour which runs, fast and serene, carrying duck weed and secrets like that of the mythical otters once apparently spotted downstream. We found an old USB cable there once, drifting like petrified seagrass in the section half-filled with red bricks bombed into the riverbed during WWII. Building management regulations prevent us from having our dog here, and so my son waits each morning by the window to greet a single white pigeon who comes to warm herself up next to a steaming down-pipe. In the background, bells break the morning drizzle as gargoyles and griffins leer down at the city's empty streets. But for them, and for the homeless dogs guarding their companions, there are no animals wandering this town – the birds have for the most part gone for the winter. The nearby zoo and safari park have reinvented themselves into dinosaur theme parks, complete with giant plastic replicas, cozily bracketing modern human history. This in stark contrast to the world of Chaucer's *Canterbury Tales*, replete with foxes, horses, roosters, dogs, falcons, crows, cats, griffins, pelicans and phoenixes. Stone, wood and plastic effigies of animal life are what remain here. Impressions on heraldic arms; artifactual creatures who do not shit or sleep or otherwise inconvenience our world heritage.

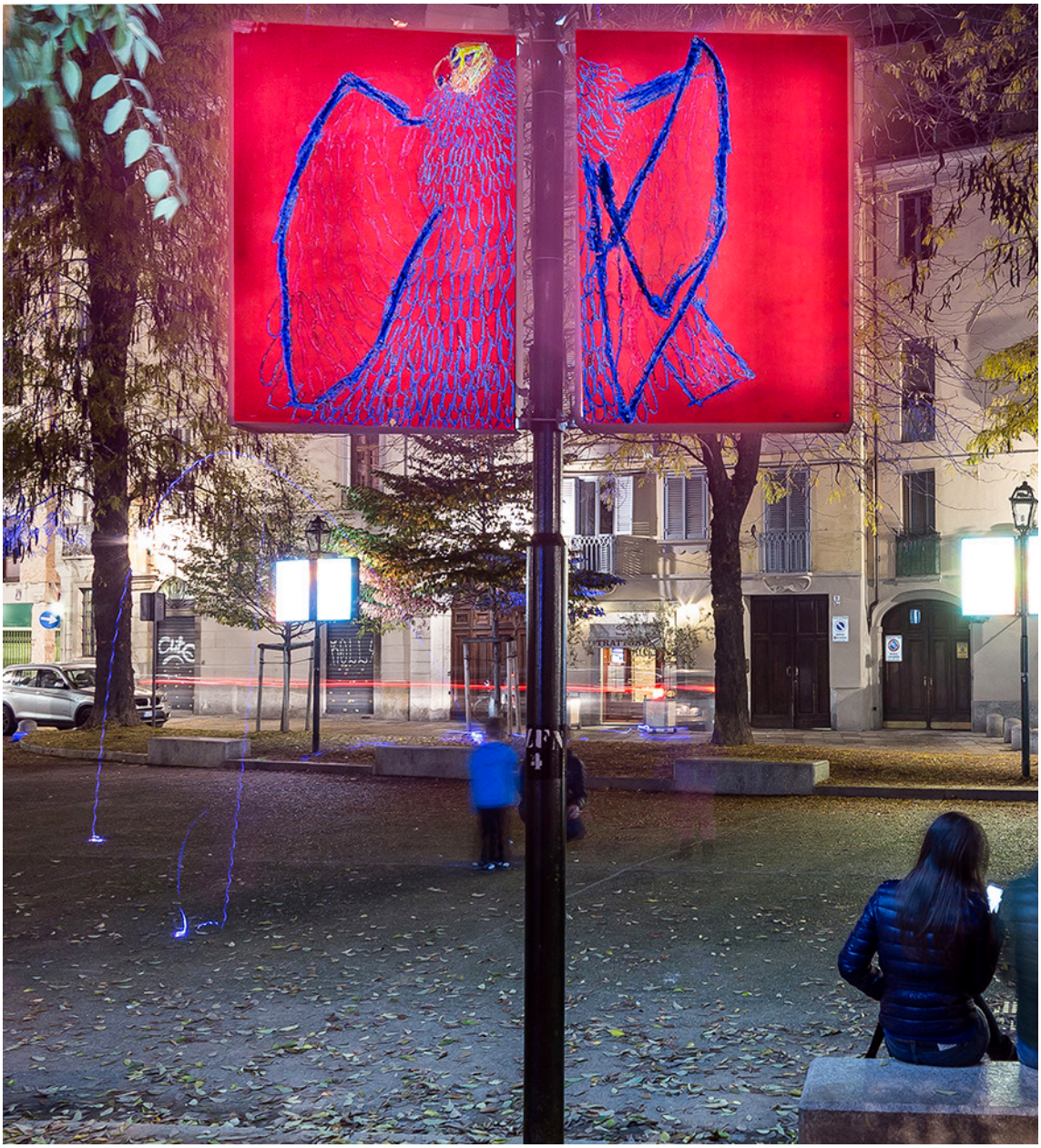
The talk of the pigeon reminds me of my childhood: a place filled with animals. Stray cats and dogs stroll the streets in Kumamoto, Japan; kittens appear here and there; the embers of fireflies twinkle in the bamboo forests, the danger of snakes and millepedes, the incessant high-pitched drone of cicadas in the dank perfume of summer flowers; the raccoon dogs; the twilight owls, the few remaining rice paddies. Now they are muffled by high-voltage lamps and apartment blocks. The fireflies are gone. The stray dogs are gone. The rice fields are a marshy sports ground that stretches out towards the neon city: Kumamoto. The name means 'the origin of bears'. There may or may not ever have been bears here; they were perhaps always phantasmic – bears that carried the spirit of a community by virtue of their corporeal generosity. This would make sense of their appearance now as the city's mascot, 'Kumamon'. Kumamon, or 'bear-person', is a grinning black figure dancing across the city. The bear is everywhere we look, or rather, is looking at us from everywhere: from pillowcases; cars; billboards; crockery; food; books; buses; bags; television. Perhaps we have domesticated a black terror. Perhaps it marks an absence of; a longing for, the sacred, all over the place.

For a time, my home in Melbourne was in a rainforest on a mountain range marking the outer curve of the city. To go into town my dog and I would sit at a bus stop with clouds yawning out below us towards the skyscrapers in the distance, while pairs of yellow-tailed cockatoos floated by in no particular hurry. The bus would meander through suburbs to the main thoroughfare of the Central Business District, a permanent pastiche of the multicultural food festival. Here are green spaces; here are vertical gardens; here is the shining city on the hill. The city itself is a declaration of the oldness

of the new, decked with patinated, curated 20th century furniture. Ironic taxidermy is *de rigueur* in the popular bars. Warm nights are filled with honeysuckle and barbecues. Under cover of darkness animals and animal parts are trucked in and out of the city. While the kangaroos, emus, potoroos and wombats only appear in the city as children's book characters, there is nonetheless a life with animals in this hot place. Urban residents fight an ongoing nocturnal battle with possums, ants, deadly spiders and rodents. Squeals of rainbow lorikeets tail the raucous gangs as they swoop between stands of eucalyptus trees dotting the university quarter. In the inner suburbs, immigrants keep illegal chickens beneath olive trees and figs. In this city, the 'urban' is an anxiety buffeted by desert winds from the north and antarctic winds from the south. It is concrete that does not end, so much as is swallowed at its edges by the reclaiming bush.

The planet has so far witnessed five major mass extinctions where over 75% of species were lost (probably due to rapid climactic change), the first taking place 444 million years ago and the most recent, 66 million years ago. Our lifetime marks the beginning of the sixth major mass extinction. Over the next three years, the number of wild animals in the world is predicted to fall by two-thirds, compared to those living in 1970. The human urban population is expanding by 1.5 million people every week. Between 2011 and 2013 alone, China poured more concrete over its earth than the United States did during the entire 20th century. Alongside this annihilation of habitat, the equivalent of 48 football fields of forest cover is cut down every minute. Animals are bred and slaughtered at an exponentially increasing rate: 60 billion land animals alone were killed last year for food. At our current rate of consumption, all global fish stocks are predicted to run out by 2050. And all this exacerbates climactic change, whose effects compounded by our simple consumption of the earth are so terrifying that we prefer to think of it as a sick joke. When we look for the law of urban animals, then, we must look not only to the failure of the United Nation Framework Convention on Climate Change and the failure of every other international environmental agreement created in the 20th century, but to the political economy that was facilitated the creation of modern states and the post-imperial settlement which takes the form of international trade law today.

Meanwhile we console ourselves with cat videos; statues, and animated muppets in the knowledge that we, at least, are the *Übermensch*. The bell tolls for the end of the city and the last man.



# The Pet Keeping Industry in the American City

**Irus Braverman**

When I run, I don't particularly like to be interrupted. After immigrating to the United States from Israel some ten years ago I was rather abruptly made aware of what felt like the arrogant behavior of American dog owners, with whom I shared the public parks.[1] Many times they blithely let their dogs off leash and allowed – encouraged even – their running after joggers like me. "Don't worry, she's a friendly dog," one pet owner shouted after me as I was attempting to escape the dog's ardent fascination with my ankles. I'll spare the readers the details of how that encounter ended, except to mention that the police were involved, as well as a bloody ankle. Another such "friendly" dog, a huge Rottweiler, knocked my then four-year-old daughter down. Despite my daughter's visible distress, the owner insisted that the dog loved kids and was just playing around. My daughter was traumatized for years to come.

But then two years ago, my now nine-year-old daughter decided that she, too, wants in on the American dream. A family without a dog is incomplete, so the dominant narrative around us seems to dictate – and that narrative was readily picked up by my daughter and, subsequently, by her younger sister as well. The pressure is now fully on for us to "adopt" a dog who would fill our days with laughter and fun. A dog who would make us belong.

Despite my initial urge to satisfy my daughters' passionate desire, I cannot help but to contemplate the broader role of urban and suburban pets in the contemporary United States and, specifically, the capitalist foundations of the making and keeping of dogs in the American city. Then there is also the largely undiscussed eugenic aspects of dog breeding, which is inextricably linked with America's early sterilization programs for humans. This history, and the preoccupation with purity and genetics, arguably still hover over existing calculations of pedigree, purebred establishments, and dog show practices. For all these reasons, I found Jessica Pierce's 2016 book *Run, Spot, Run* to be a timely critique of America's contemporary pet animal industry.

Pierce draws on her wide ranging professional career as a writer and bioethicist, as well as on more familial and familiar narratives, to highlight the suffering that the current "pet wave" is causing to the real animals involved. Leveraging the benevolent assumptions underlying our relationship with pet animals, Pierce questions the morality and the language of American pet culture. "While many may view the increasing popularity of pet keeping as a sign that we love animals more and more, it should give us pause. Pet keeping is a tidal wave we are being carried upon – we, along with millions and millions of animals – and this wave has huge destructive potential." That she herself has owned and still owns pets not only affords Pierce both compassion toward and insights into the challenges of pet

Irus Braverman is Professor of Law and Adjunct Professor of Geography at the State University of New York at Buffalo, SUNY. She is the author of *Planted Flags: Trees, Land, and Law in Israel/Palestine* (2009), *Zooland: The Institution of Captivity* (2012), and *Wild Life: The Institution of Nature* (2015), and editor of *The Expanding Spaces of Law: A Timely Legal Geography* (with Nicholas Blomley, David Delaney, and Alexandre Kedar; 2014) and *Animals, Biopolitics, Law: Lively Legalities* (2016).

irusb@buffalo.edu

1 *Acknowledgements*. This article draws on a book review published in the *Times Literary Supplement*.

keeping, but also allows her to slaughter a few sacred cows about pet keeping in urban America that might otherwise be unacceptable to her fellow pet owners.

The most sacred cow that *Run, Spot, Run* slaughters is euthanasia (from the Greek "easy death"). Pierce quotes in this context from philosophers who have documented that for some, "animal suffering matters more than death," which, she points out, is "strikingly at odds with the way we think about suffering and death of humans." But her analysis of euthanasia – or "shelter killing" in her preferred terminology – is not only philosophical: Pierce enters into this "Forbidden Zone" by signing up for a two-day euthanasia-by-injection course held in Denver. At the end of this course, participants were required to kill a live dog for practice. "Even though I was merely a spectator," Pierce recounts from the killing, "my whole body was shaking and I couldn't stop the tears from flowing. I felt responsible for taking this dog's life – a dog whose name we never even knew." Perhaps because of the emotional intensity of this experience, Pierce adopts a strong stance against euthanasia, which she argues "is part of the well-greased machinery of the pet industry."

*Under the cute and cuddly appearance of urban pet culture thus lies a ghastly necropolis*

The pet industry's profitable and visible existence in the American city is arguably facilitated, made possible even, through these animals' institutionalized and invisible killings, even while presenting such killings as acts of compassion toward the animals. Under the cute and cuddly appearance of urban pet culture thus lies a ghastly necropolis. The assumption, Pierce highlights, is that death causes no harm to an animal. No wonder, then, that euthanasia rates in the United States are at a soaring high in comparison to other countries ("every eleven seconds, a healthy dog or cat is euthanized in U.S. shelters"). Noting that the vast majority of America's cats and dogs are killed via euthanasia, Pierce abruptly concludes: "Would I like to see all euthanasia technicians throw down their syringes and needles and refuse to participate? Yes. . . . . [B]ecause only when we break the silence and truly acknowledge what is happening will we feel compelled to roar out in rage against the killing."

This institutionalized killing is intimately related to profit. Tucked away toward the end of her book is Pierce's piercing analysis of pet keeping as a capitalist practice (this is my terminology; Pierce doesn't mention the word). There, Pierce disturbingly exposes how animals in shelters – supposedly the humane heart of America's pet keeping society – are in fact "viewed as products to consume at whim." The animals, she documents, are the cheapest products in this package; so, for example, one would pay 12 cents per fish, compared to 90 dollars for a fish tank. Pierce goes on to identify the "shelter industry" as what effectively enables this hegemonic production of animals as pets to proceed undisturbed. In her words: "shelters keep the pet industry from crashing in on itself since they control the surplus and thus keep the market for new product healthy."

In addition to making profit over the pets themselves, the more serious money to be made – and, indeed, the pet industry in the United States makes 50.8 billion dollars annually – is from pet food, supplies, and medicine. For the pet industry to stay profitable, and to grow by the year, "the industry spins the narrative of pets as a happy and necessary part of every healthy family." The narrative that so many Americans buy into is not only that "happy pets make their families happier and healthier," but also that "owning pets is part of our American heritage of independence and freedom." As a random cashier in a café told me, without wincing, "my dog is my best purchase ever, I love her so much."

Understanding the role that capitalism plays in urban dwellers' contemporary relationship with pet animals may also help to answer a big question that Pierce largely avoids: why is pet keeping so prominent in the United States? What is it in this particular society, at this particular time, and in the

increasingly urbanized spaces that it inhabits that makes America's urban residents so prone to this particular industrial production? And no less importantly: how does the American pet industry relate to, and depend on, other animal related industries that thrive at the margins of the metropolis, such as the slaughterhouse, the zoo, and the exotic animal trade?

I shared *Run, Spot, Run* with my older daughter. I guess I was hoping to use the book as objective evidence from the trenches about why having a dog is not only hard work but also an ethically complicated practice, and one that we are destined to fail at. Owning a dog in Buffalo, New York, is not like buying any other animal, say a guinea pig or a fish. Rather, owning a dog is buying a one-way-no-return ticket to an all-consuming social life, complete with gadgets, medical bills, licensing responsibilities, and outings with other dog owners; it is about restructuring one's daily (and nightly) routines, rethinking travel plans, recalculating monthly payments and bills. And all that why? How to explain that so many American city dwellers are willing to take on such tasks and responsibilities?

I would offer that the main reason is that urban folks in the United States have been legally, culturally, and emotionally cut off from any significant relationship with animals: farm animals (horses, goats, pigs, in some cases chickens) have largely been banned from American cities and wild animals are, for the most part, not allowed into one's home. In New York State, for example, wild animals are state property even when they reside on one's private property and, as such, are subject to various requirements. New York General Municipal Laws state that: "With the exception of pet dealers, every person owning, possessing, or harboring a wild animal or a dangerous dog within this state shall report the presence thereof to the clerk of the city, town, or village in which such wild animal or dangerous dog is owned, possessed, or harbored" (N.Y. Gen. Mun. Law §209-cc).

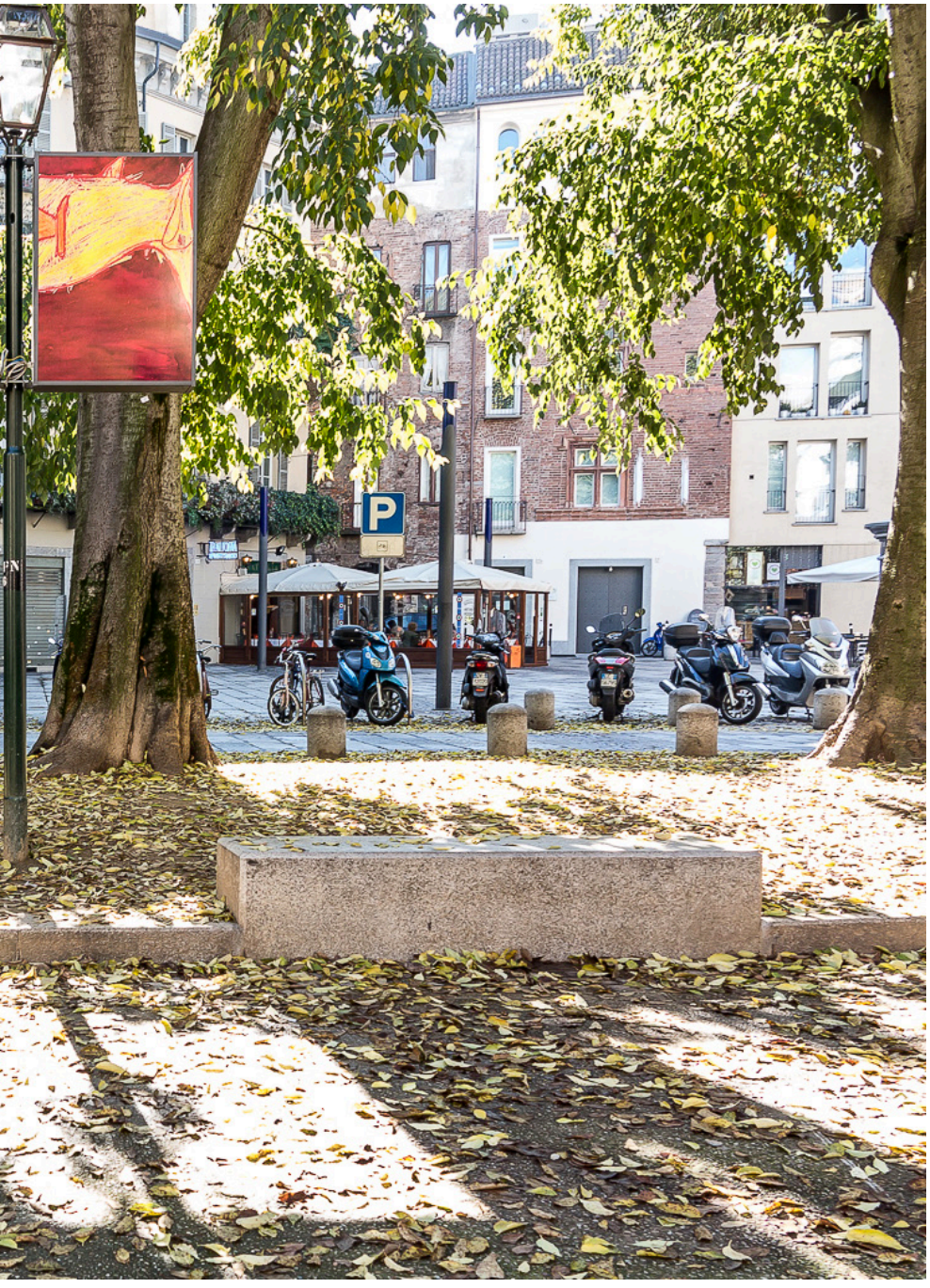
Add to this spay and neuter controls, and you get a situation whereby if someone who lives in the city wants to experience a longtime and meaningful relationship with an animal, they must typically purchase her. Spay and neuter is performed by many municipalities and breeders in the United States and is considered best pet keeping practice. Yet alongside its usefulness for reducing the amount of "surplus" animals, controlled breeding through spay and neutral assures that commercial breeders generate continual profits by exercising a monopoly over the new animal commodities. This monopoly over human-animal relationships in the city is exploited to the extreme by the pet industry.

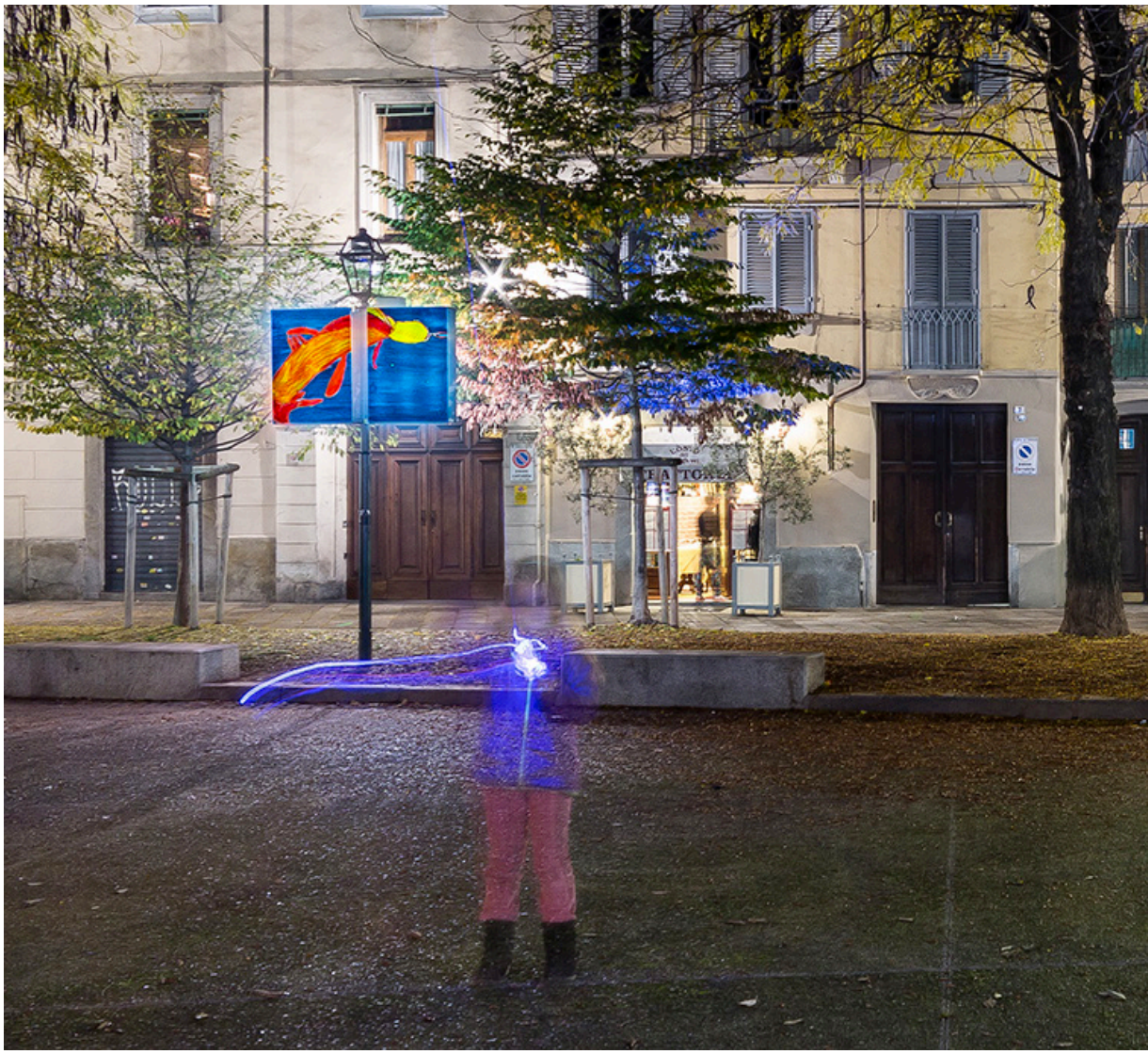
Indeed, the central, most direct, way for animals to lawfully become pets within the American home is under their designation as companion species. The city, for its part, enforces this relationship to the letter. Through the application of licensing and identification requirements, the city ensures that each and every dog has an owner. As I have documented in my 2013 chapter "Legal Tails: Policing American Cities through Animals," at least three agencies enforce the federal, state, and municipal legal norms that apply to companion animals in the City of Buffalo, New York. New York State law provides that: "The owner of any dog reaching the age of four months shall immediately make application for a dog license" (Article 7, Section 109 of the New York's Agriculture and Markets Law).

The same section also provides that the application for an annual license must be submitted to the city clerk and that, "The application shall state the sex, actual or approximate age, breed, color, and municipal identification number of the dog, and other identification marks, if any, and the name, address, telephone number, county and town, city or village of residence of the owner. . . . The application shall be accompanied by the license fee . . . and a certificate of rabies vaccination" (N.Y. Agric. & Mkts. Law §109). Section 111 adds that each licensed dog "shall be assigned, at the time the dog is first licensed, a municipal identification number. Such identification number shall be carried by the dog on an identification tag which shall be affixed to a collar on the dog at all times, provided that a municipality may exempt dogs participating in a dog show during such participation" (N.Y. Agric. & Mkts. Law §111).

In other words, animal laws instruct us which animals are allowed into the city and under what conditions. More than regulating the everyday of urban life as it pertains to animals, humans, and the interrelations thereof – all heavily reigned by the capitalist paradigm – such laws and their enforcement determine the very essence of the city. Through its distinct matrix of animal-human relationships, the city is distinguished from its significant other, "the country," where a different set of animal-human relations takes place.

My critique of the capitalist pet industry aside, I may still need to get my daughters a dog and once and for all accept my destiny as an American city dweller.


P

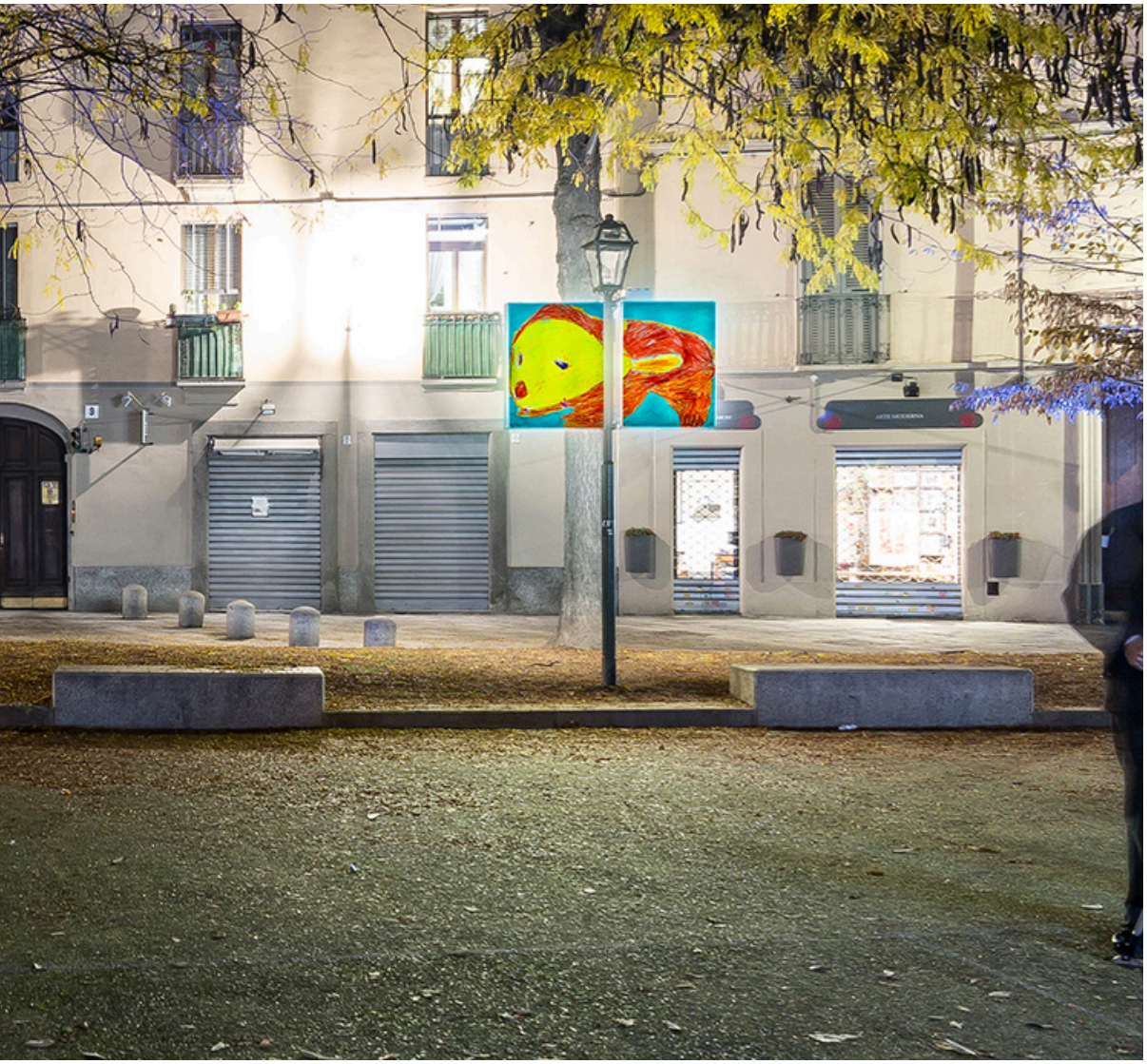


**lo Squaderno 42**
***Urban Animals***

**edited by // Andrea Pavoni & Andrea Mubi Brighenti**

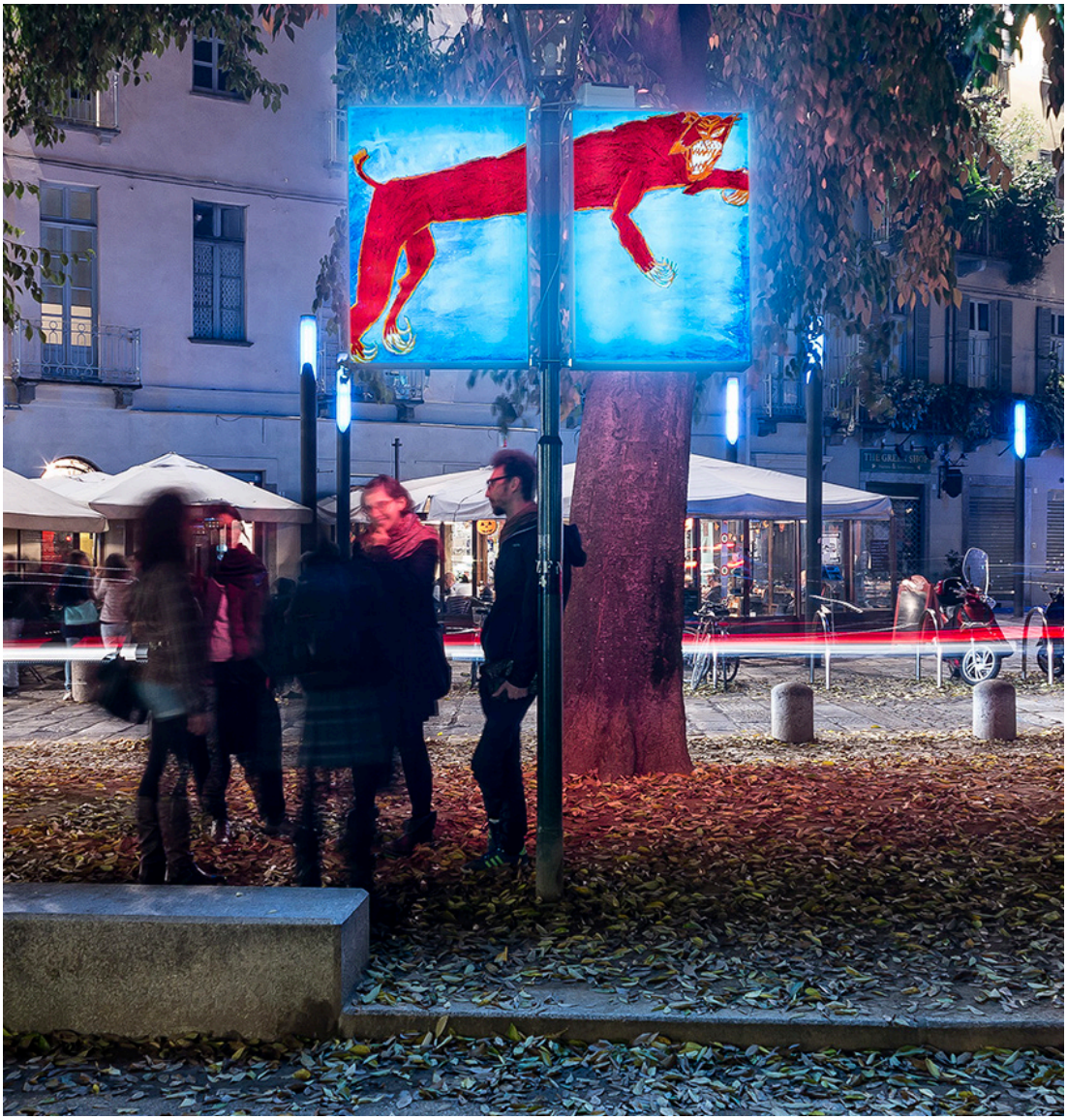
**Guest Artist // Luca Santiago / Atelier dell'errore**

Special Thanks : Emma Ciceri



*lo Squaderno* is a project by Andrea Mubi Brighenti and Cristina Mattiucci
helped and supported by Paul Blokker and Giusi Campisi.
La rivista è disponibile / online at www.losquaderno.professionaldreamers.net. // Se avete commenti, proposte o suggerimenti, scriveteci a / please send you feedback to losquaderno@professionaldreamers.net

**published by *professionaldreamers* under CreativeCommons licence 4.0**
**Impressum | December 2016**





In the next issue:
Urban Nostalgia

sQuade