

ANIMALS

Richard Weller



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Probably to survive being attacked, 600 million years ago some eukaryotic cells found it advantageous to band together and form larger assemblages. Epithelial cells then folded themselves into gastrula, essentially tubes with what we now refer to as a mouth at one end and an ass at the other. Around this fundamental morphology, evolution has sculpted an almost infinite array of fleshy forms. Of all these minor miracles we are but one, and although we know we are, as Darwin put it, “all netted together,” we still like to tell ourselves we are the exceptional ones.¹ Unlike other animals we have words, numbers, foresight, free will, society, cities, and above all, gods.

Extraordinarily, we are also the first species in history to name an entire geological era after itself. But if we take the Anthropocene as an indictment rather than triumph, as I think we should, then our exceptionalism must now come under interrogation. As the Australian ethnographer Deborah Bird Rose renders it:

The legacies of Western machinism have manifested through repeated assertions of human exceptionalism – that man is the only animal to make tools, that man is the only animal with language, a sense of fairness, generosity, laughter, that man is the only mindful creature. On the one hand all of these claims to exceptionalism have all been thoroughly undermined. On the other hand the term Anthropocene reminds us that it is not yet time to jettison a sense of human exceptionalism. Instead, by foregrounding the exceptional damage that humans are causing, the Anthropocene shows us the need for radically reworked forms of attention to what marks the human species as different.²

A cornerstone of constructing human identity throughout history has been our alleged differences from animals. It is little wonder then that so much recent scholarship has returned to the question of the animal with renewed scrutiny of what it means to be human. Indeed, on the occasion of their extinction, animals are suddenly everywhere.

The ascendance of Human-Animal Studies (HAS) in the humanities and with it the deconstruction of human exceptionalism, coincides generally with the growth of environmentalism over the course of the latter half of the 20th century. The origin of HAS can be pinpointed to the 1975 publication of

Peter Singer’s *Animal Liberation: A New Ethics for our Treatment of Animals*.³ Three years later, zoologists William McGrew and Caroline Tutin concluded in the journal *Man* that chimpanzees are not just smart animals but, like humans, actively construct a culture.⁴ McGrew and Tutin’s conclusion has since been controversially reinforced by others such as primatologist Sue Savage-Rumbaugh who claims that her research associate and coauthor, the bonobo “Kanzi,” spontaneously learnt words in much the same way a child does.⁵ It was also around this time that the stories of women such as Biruté Galdikas living with orangutans in Kalimantan, Jane Goodall living with chimpanzees in Tanzania, and Diane Fossey living (and dying) with gorillas in Rwanda entered popular culture.

Two years after McGrew and Tutin’s scientific publication, philosophers Gilles Deleuze and Félix Guattari formulated their notion of “Becoming Animal” – inspiration perhaps for Jacques Derrida who left, on his death bed in 2004, an incomplete retort to Rene Descartes titled “The Animal That Therefore I Am.” In anthropology two important recent books—*Beyond Nature and Culture*⁶ by Philippe Descola and *How Forests Think: Towards an Anthropology of the Nonhuman*⁷ by Eduardo Kohn—both published in 2013, build upon the legacy of Claude Lévis-Strauss’s renowned investigations into animism. For Descola and Kohn animism is a way of circumventing, if not entirely reconciling, the problem of dualism in western thought. Whereas capitalism and its mechanistic underpinnings render the slaughter of millions of animals in so-called “concentrated animal feeding operations” invisible, animism sanctifies the highly selective and ritualistic killing of wild animals in relatively small numbers.

These scientific, philosophical, and anthropological reorientations have been consolidated in books such as Jennifer Wolch and Jody Emel’s 1998 *Animal Geographies*⁸ followed by Julie Urbanik’s 2012 *Placing Animals*.⁹ Two years later, the *Routledge Handbook of Animal Studies*¹⁰ was published and most recently, in 2018, Lori Gruen—a professor of ethics at Wesleyan College—published *Critical Terms for Animal Studies*.¹¹ Under the rubric of environmental humanities, HAS is also now being keyed into the general discourse of the Anthropocene where, for example, in books such as *Art in*

the Anthropocene by Etienne Turpin and Heather Davies¹² and *Arts of Living on a Damaged Planet*¹³ by Anna Tsing, artists, scientists, and sociologists, among others, are coming together to define the zeitgeist as decidedly more-than-human.

At the same time that animals have risen to prominence in ethics, philosophy, and anthropology, they have also been actively reimagined and strategically repositioned in visual arts and literature. In art, after centuries of almost total absence as subjects in their own right, a breakthrough occurred when, in 1969, Jannis Kounellis herded a dozen horses into the Galleris L'Attico in Rome. This was followed in 1974 by Joseph Beuys's performance at the Rene Block Gallery in New York where he spent a week inside a room with a coyote. In the same year William Wegman produced a film of himself giving his dog "Man Ray" a spelling lesson, a form of performance art he has continued to this day. And who could forget Damien Hirst's 14-foot tiger shark suspended in formaldehyde first displayed in 1991. Not without criticism, Hirst has since expanded his taxidermic menagerie to include no less than 27 more sharks, as well as large numbers of fish, sheep, cows, calves, bulls, horses, pigs, a brown bear, and his *coup de grace*, a whole zebra. Other artists such as the partnership of Olly Williams and Suzi Winstanley on the other hand, apply a different code of conduct to their engagement with animals; first, their animals are always alive, and second, they only make art about their subjects while embedded in *their* habitat observing them as they go about their business.¹⁴ Unlike Hirst who farms his work out to fisherman, Olly and Suzi literally swim with sharks while trying to draw them.



This emphasis on processes of life rather than products of death is developed further by Natalie Jeremijenko who gathers her artwork under the title "OOZ." Jeremijenko works to the rule that any action you can direct at an animal, the animal can direct back at you. Instead of packaging art for galleries, Jeremijenko constructs elaborate theatrical, quasi-experimental events to bring animals, plants, and people together and emphasize the urban ecological networks they are all a part of. For example, her 2012 project *Salamander Superhighway* is a small pipe set within a speed bump across a road near the Socrates

Sculpture Park in New York that provides safe passage for migrating salamanders. As they move through the superhighway they trigger a sensor that sends tweets to humans such as, "Hi Honey, I'm heading home."¹⁵



In literature, perhaps best known is Elizabeth Kolbert's 2014 book *The Sixth Extinction*, which outlined the loss of biodiversity in a way that caught the public's attention and became a bestseller.¹⁶ In two more recent books—*Being a Beast*¹⁷ by the philosopher and veterinarian Charles Foster and *Goat Man*¹⁸ by Thomas Thwaites—the authors regale their respective attempts to not only live *with* but also live *like* their animal subjects. Eating worms and digging burrows, Foster temporarily "became" a badger. He has also lived as an otter, an urban fox, a red deer, and a swift. For his field work Thwaites disguised himself as a goat replete with custom-made prosthetics to walk on all fours so as to be accepted into a wild goat community.

So, what about the status of the animal in design culture? Apart from the established genre of designing zoological enclosures that can only reiterate or disguise the domination of the human gaze, that animals would even be considered a subject of design outside of zoos has been, until recently, uncommon. Consequently, MVRDV's provocative "Pig City," a high-rise pig farm designed in 2001 came as something of a shock.¹⁹ But here the issue was not so much one of animal rights or a concern with human identity in relation to animals, rather it was one of pragmatically reducing the sprawling footprint of Dutch pork production. From the animal's perspective it likely matters naught whether the concrete floor plate of the slaughterhouse is single or stacked. As Temple Grandin, an animal behaviorist with an uncanny ability to empathize with ruminants, highlighted, what matters is the animal's experience in that slaughterhouse. She designed a new, more "humane" way of guiding cattle through the horrors of the modern abattoir to their endpoint.

We prefer of course to look at picturesque landscapes with wild animals, especially from the comforts of our living rooms or from designer hideaways.

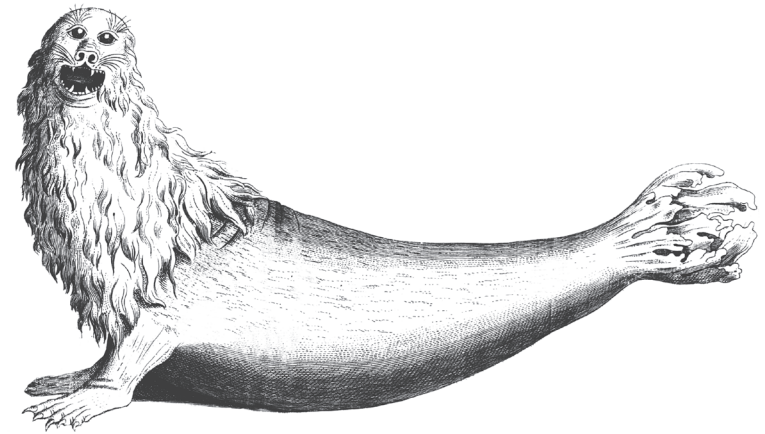
One of the most photogenic of these in recent times is surely the Norwegian Wild Reindeer Centre Pavilion located at Hjerkinn on the outskirts of Dovrefjell National Park. Designed by Snøhetta, the pavilion is a masterclass in the architectural craft of ecotourism, but it does little to challenge conventional human-nonhuman relations. Neither do the barges tethered to Pier 39 in San Francisco on which hundreds of wild sea lions sunbathe. And yet, the integration of the sea lion herd into the general hubbub of an active port is a happy and unusual instance of the ideal that cities could be places of cohabitation. Lolling about in the sun, oblivious to the crowds who gather to marvel at their otherness, the sea lions seem to satisfy Jennifer Wolch's call "to renaturalize cities and invite the animals back in and in the process re-enchant the city."²⁰ For Wolch this re-enchantment is not just for human pleasure, it is "to allow for the emergence of an ethic, practice, and politics of caring for animals and nature."²¹

While many landscape projects may well be unintentionally good for a range of species, outside of zoos there are few that have been explicitly designed *for* – let alone *with* animals. Exceptions include a 1990s West 8 icon, the Eastern Scheldt storm surge barrier in Holland made from large swathes of black and white shells,²² intended to be conducive to the nesting habits of local birds. More recently, Ken Smith has made a fun dog park on the East River waterfront of New York;²³ JCFO has detailed the edge of the Seattle waterfront so as to create a safe haven for salmon;²⁴ Kate Orff has put oysters to work off the coast of Staten Island, New York, to buffer storm surge;²⁵ and MVVA may yet build the ARC Wildlife Overpass in Vail, Colorado.²⁶

The lack of design *for* animals in landscape architecture is matched by a dearth of writing on the topic.²⁷ Seeking to address this deficiency, Kevan Klosterwill, writing in *Landscape Journal*, set out the topic in three parts: the scenic animal, the systematic animal, and the social animal.²⁸ In broad brush strokes he mapped each of these onto the history of landscape architecture from the 18th century to today. The scenic animal relates to the ways in which primarily agricultural animals were discussed by connoisseurs in relation to the aesthetics of the aristocratic English landscape. But so too we could include in this category the 19th- and 20th-century creation of national

parks and the faux naturalism of 20th- and early-21st-century zoological enclosures. The systematic animal is that which is subsumed into landscape planning based on landscape ecology. This is the landscape of corridors, patches, conservation easements, and protected areas planned according to multi-species networks and wildlife population dynamics. Finally, the social animal relates to design that seeks "cohabitation and collaboration where humans play a less than dominant role" and to unsettle "the logic of nature and culture on which many conservation ideas were privileged."²⁹ In other words, designing for the social animal means bringing contemporary landscape architecture and HAS together in challenging the exceptionalism of the human subject. And since the act of design is typically considered a quintessential feature of that exceptionalism, it means that the way in which we design must itself be questioned.

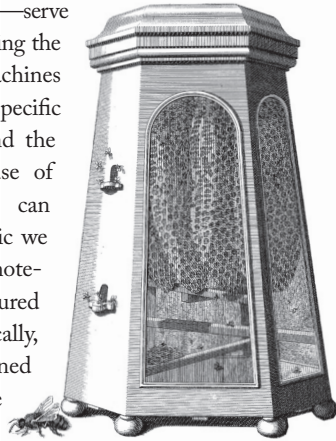
This was the premise of the LA+ CREATURE design competition held by the Weitzman School of Design's flagship journal *LA+* in 2020. The 258 entries received provide insights into how designers around the world are currently thinking about the status of the animal in their work.³⁰ Instead of trying to squeeze these entries into Klosterwill's categories (scenic, systemic, and social), I propose an aesthetically more suggestive taxonomy of Rewilds,



Green Machines, and Monsters. Projects falling into the Rewilds category typically situated the animal as a victim of human ignorance and exploitation and sought to correct this through the application of the principles of landscape ecology to sizable tracts of land and water. These projects tried to win back land from agriculture, urbanization, and infrastructure in order to make room for the animal and its habitat. Aesthetically, the Rewilds were typically presented in an arcadian, pastoral, and picturesque manner, foregrounding a rebounding, naturalistic ecosystem where any evidence of the technology involved in its recreation is rendered invisible. In these images the animal is the hero, but the human also plays a role; no longer wreaking havoc, now a caring steward helping the land and threatened species through a process of healing. In short, this is the world envisaged by the conservation movement, and while it is crucially important at the landscape scale in urban contexts it can lapse into a reification of nature that reinforces rather than reimagines the dualism of culture and nature that is in fact causal to the environmental crisis in the first place.



Instead of decoupling culture and nature as the Rewilds would have it, the Green Machines accepted and tried to work with the contemporary city and all its related infrastructure as the basis of a new nature. In this schema the city is reconceptualized as a novel ecosystem, one that could—if it were innovatively designed and retrofitted—serve both humans and nonhumans and bring the two closer together. The Green Machines can also be designs applied to specific environmental problems well beyond the actual city. For example, if, because of human-induced changes, walrus can no longer navigate through the arctic we just design a machine—say a remote-controlled barge covered in manufactured ice—to help them do so. Aesthetically, the Green Machines are less concerned with restoring a certain landscape in the image of natural nature as



they are with utilizing and foregrounding technology's capacity to solve ecological problems and help streamline ecosystem services. This is the world of greener and smarter cities where the myth that design can solve most, if not all, of our problems is alive and well.

The projects that I refer to as the Monsters are perhaps the most interesting; they are less romantic than the Rewilds and more suspicious of a designed future than the Green Machines. Emerging from a critical, post-human, post-natural sensibility that now permeates the humanities and the art world, these are projects that actively seek to destabilize anthropocentrism and incite indeterminate, amoral processes of evolutionary change. The aesthetic of this approach is typically inclined toward the cyborgian, the dystopian, and the grotesque. Often from within the political milieu of ecofeminism and eco-socialism their creators are critical of modernity and its manifestation in the climate crisis of the scientific and corporate state and equate the exploitation of animals with the exploitation of people. Design can't necessarily fix the world's ecological problems—indeed to even read the situation as a problem requiring a fix is to be part of the problem—but it can open our minds and bodies to transformative experiences that are in themselves considered a form of prerequisite for socio-political change and an acceleration of evolution's creativity.



Each of these categories—the Rewilds, the Green Machines, and the Monsters—has its own preferred scale: respectively large, medium, and small. Each category also has its own mythos: respectively the paradisiacal, the ecotopian, and the dystopian. The challenge for landscape architecture as a spatial practice in relation to the animal is, I think, to work across the grain of all three at once. If we are to have any hope of broaching the sixth extinction, then design must—to return to Klosterwill—interconnect the scenic, the systemic, and the social. At Penn over the last eight years I have been concerned with how to do this in terms of curating my own research so that it might make a meaningful contribution to the global conservation community's efforts to protect and enhance biodiversity. Since the mid-20th century, conservation efforts have generally resulted

in the creation of protected areas. With the oversight of the International Union for the Conservation of Nature (IUCN) these lands now amount to just over one-fifth of the world's terrestrial area – and although this “land grab” is not without its critics and contradictions, it is by any measure an extraordinary achievement.

The problem from a long-term ecological perspective, however, is that the global estate of protected areas is an archipelago of isolated and ad hoc fragments. This makes it almost impossible to achieve the intent of the two key words in the Convention on Biological Diversity: representation and connectivity. Representation means that instead of setting aside, say, a vast area of land in Siberia, protected areas should represent the world's biological diversity more or less equally across its 867 ecoregions. Connectivity means that, ideally, protected areas would be connected into larger landscape networks so that species can migrate over time to adjust to the pressures of climate change. Achieving connectivity means building landscape corridors of restored habitat through areas of land use typically hostile to biodiversity. If the 196 nations that are parties to the Convention on Biological Diversity are serious about meeting their protected area targets and achieving representation and connectivity, they should come together to effectively reorganize land use on a global scale.

This, of course, is highly unlikely, but perhaps design thinking as opposed to only scientific and political approaches might be able to help. The design problem is to decide where and how greater connectivity and greater representation in the global conservation estate can be achieved. In seeking to provide a solution to this design problem, my research has focused on projects at two scales: first, at a planetary scale is the World Park Project; and second, at a regional scale, is the Hotspot Cities Project. Instead of just adding more fragments of protected area in an ad hoc manner, The World Park Project³¹ galvanizes and concentrates the global conservation effort to create over 160,000 square kilometers of contiguous, restored habitat through many of the world's biodiversity hotspots. The World Park begins with three trails, the first from Patagonia to Alaska, the second from Australia to Morocco, and the third from Namibia to Turkey. These

trails are located to link the maximum number of protected areas in the maximum number of biodiversity hotspots. The trails are low-investment catalysts intended to attract people into these regions, not only as tourists but also as workers engaged in the World Park's bigger mission of restoring degraded landscapes in between existing protected areas so as to create connectivity. Whereas old-school conservation typically saw humans as threats to be excluded, the World Park—in this, the decade of ecological restoration—actively engages people in its creation and management.

At a finer scale, the Hotspot Cities Project³² addresses the problem that over 90% of major cities (defined as 300,000 people or more) in the world's biodiversity hotspots are sprawling in direct conflict with endangered species. The premise of this work is that urban sprawl and the degradation of peri-urban landscapes is not a *fait accompli*; it can be mitigated by urban planning and urban design that includes a genuine concern for biodiversity. Biodiversity doesn't just mean charismatic animals and attractive flora, it encompasses entire ecosystems; for without healthy ecosystems, there can be no healthy cities, and without healthy cities there can be no healthy society. Barricading isolated pockets of land against urban growth—so-called “fortress conservation”—is ultimately ecologically untenable. It is also philosophically flawed because it recapitulates a worldview where culture is one thing, and nature another. This dualism is not how the world works, and nor is it actually the world we live in. We need, then, to also come at the problem of habitat loss from the urban side of the equation and redesign urban growth so that cities can become symbiotic with their landscapes rather than parasitic. In the Hotspot Cities Project we have not only identified which cities are sprawling destructively into their neighboring lands, we have also conducted case studies showing how urban design can integrate biodiversity with the needs of urban growth.³³ When we put the World Park and Hotspot Cities projects together it is possible to see how, from the scale of urban neighborhoods to the scale of the planet, it is possible to create an integrated network of landscapes that supports more-than-human life.

1. The full quote reads, “If we choose to let conjecture run wild, then animals, our fellow brethren in pain, diseases, death, suffering, and famine—our slaves in the most laborious works, our companions in our amusements—they may partake [of] our origin in one common ancestor – we may be all netted together”: Charles Darwin, *The Descent of Man and Selection in Relation to Sex* (Penguin Classics, 2004; first published by John Murray, 1871), 126.
2. Deborah Bird Rose, “Shimmer: When all you Love is Being Trashed” in Anna Tsing, et al. (eds), *Arts of Living on a Damaged Planet: Ghosts and Monsters* (University of Minnesota Press, 2017), 52.
3. Peter Singer, *Animal Liberation: A New Ethics for our Treatment of Animals* (Harper Perennial, 1975).
4. William C. McGrew & Caroline Tutin, “Evidence for a Social Custom in Wild Chimpanzees?” *Man* 13, no. 2 (1973): 234–52.
5. Sue Savage-Rumbaugh, et al., “Welfare of Apes in Captive Environments: Comments On, and By, a Specific Group of Apes,” *Journal of Applied Animal Welfare Science* 10, no. 1 (2007): 7–19.
6. Philippe Descola, *Beyond Nature and Culture* (University of Chicago Press, 2013).
7. Eduardo Kohn, *How Forests Think: Toward an Anthropology of the Nonhuman* (University of California Press, 2013).
8. Jennifer R. Wolch & Jody Emel (eds), *Animal Geographies: Place, Politics, and Identity in the Nature–Culture Borderlands* (Verso, 1998).
9. Julie Urbanik, *Placing Animals: An Introduction to the Geography of Human–Animal Relations* (Rowman and Littlefield Publishers, 2012).
10. Garry Marvin & Susan McHugh, *Handbook of Animal Studies* (Routledge, 2014).
11. Lori Gruen, *Critical Terms for Animal Studies* (University of Chicago Press, 2018).
12. Etienne Turpin & Heather Davies, *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (Open Humanities Press, 2014).
13. Anna Tsing, et al. (eds), *Arts of Living on a Damaged Planet: Ghosts and Monsters* (University of Minnesota Press, 2017), 1–14.
14. OllySuzi, <https://www.ollysuzi.com>.
15. Suzanne Jacobs, “This artist is using technology to bring nature back into the city,” *Grist* (November 9, 2015).
16. Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (Henry Holt and Company, 2014).
17. Charles Foster, *Being a Beast: An Intimate and Radical Look at Nature* (Picador, 2016).
18. Thomas Thwaites, *Goat Man: How I Took a Holiday from being Human* (Princeton Architectural Press, 2016).
19. MVRDV, “Pig City,” <https://www.mvrdv.nl/projects/134/pig-city>.
20. Jennifer R. Wolch, “Zoopolis” in Wolch & Emel (eds), *Animal Geographies*, 123.
21. *Ibid.*, 124.
22. West 8, https://www.west8.com/projects/all/landscape_design_eastern_scheldt_storm_surge_barrier/.
23. Ken Smith Workshop, <http://kensmithworkshop.com/erw-dog-run.html>.
24. American Society of Landscape Architects, <https://www.asla.org/2017awards/320768.html>.
25. Scape, <https://www.scapestudio.com/projects/oyster-tecture/>.
26. ARC, <https://arc-solutions.org>.
27. There are two notable exceptions: Wolch & Emel (eds), *Animal Geographies*; and John Beardsley (ed.), *Designing Wildlife Habitats* (Harvard University Press, 2013).
28. Kevin Klosterwill, “The Shifting Position of Animals in Landscape Theory,” *Landscape Journal* 38, no. 1–2 (2019): 129–46.
29. *Ibid.*, 143.
30. See *LA+ Interdisciplinary Journal of Landscape Architecture*, CREATURE, no. 14 (2021). See also, <https://laplusjournal.com/14-CREATURE>.
31. The World Park, <https://theworldpark.com>.
32. The Hotspot Cities Project, <https://hotspotcitiesproject.com>.

33. Richard Weller, et al., “The Hotspot Cities Project: The Case Study of Bogotá 2050,” *JoLA: Journal of Landscape Architecture* 16, no. 1 (2021) 76–89.