

G. Oropallo, "Framing Wilderness: The View from the City," in E. M. Formia, V. Gianfrate & E. Vai, eds. *Design and Mutations: Processes for the Continuous Transformation of the City* (Bononia University Press, 2021). Preprint.

Framing wilderness

The view from the city

In the spring of 2020, as commercial air traffic ground to a halt, and cities worldwide entered lockdowns implemented to curb the spread of SARS-CoV-2, images of wildlife reclaiming urban spaces and other anthropized areas left temporarily vacant started making the rounds in mass and social media and rekindled the conversation on the space for wildlife in the city. These spectacular images and the attendant stories of "resurgent natures" were published by news outlets and circulated over large circles of social media users (fig. 1). Many of them were later proven to be false (Daly 2020). Nevertheless, the thirst for such stories, as the geographer Adam Searle and his co-authors argue, encapsulate "certain hopes and fears regarding human-animal relations amidst the ongoing climate emergency," and is evidence of "an enhanced awareness" among "confined urbanites" of the wildlife that already inhabits urban ecologies alongside its human counterpart (Searle et al. 2021: 74).

In September 2020, the *Nature Ecology & Evolution* journal featured an article on the unique opportunity that reduced human mobility provided to researchers for understanding impact of human activity on wildlife. The article authors coined the term "anthropause." Article and neologism were illustrated by a cover featuring a elk photographed against the background of a still metropolis at dusk, above a main cover line stating "Welcome to the anthropause" (Rutz et al. 2020).

The very terms of this conversation on the space for wildlife within the urban constellation position wilderness and urbanisation in opposition with each other, or at least at the opposite ends of a spatial continuum. Yet, a crop of recent literature in urban studies highlight the level of intermingling between global history and natural

history. Spontaneous vegetation can carry traces of the urban past (von der Lippe 2020). Human-initiated fluxes of materials and labour offer many opportunities for species other than the human one to hitch an intercontinental hike. During conflicts, bombs violently redraw the lines of the urban fabric and along with it the previous balances between species (Denizen 2020). The urban space represents a type of environment as continuous over time and space that many living beings have selectively adapted to it. Cities are also collections of highly heterogeneous micro-environments and some of them can offer sanctuary to otherwise endangered species (Kowarik 2020).

This essay is a foray into the history of wilderness as cultural byproduct of urbanisation. Nature has been described as the result of a mediated, designed gaze at the world (Fallan 2019). Bárbara Mações Costa and Harry Gugger call nature a “mystified anthropocentric ideal” and evoke the romantic iconography of the urbanite wanderer who approaches the vast, raw material of wild nature as an opportunity to realize their aspirations. As Costa and Gugger underline, this relationship is established through a culturally framed view. “Man, the conscious cultural being, sets himself against the world of natural things; civilised artificiality versus original wilderness” (Gugger & Mações Costa 2014: 32).

Accordingly, the essay argues for an understanding of the city as a viewing device. Moving along a landscape for the first time will continuously provide the observer with multiple, unexpected viewpoints. In their stead, the city as a viewing device returns outlooks that reflect and document intention. This design endeavour charts the environment and overlays a normative grid on it. In the process, the open territory is thus turned from a potentially life-threatening wandering into a navigable spatial arrangement of resources. Using Deleuze’s and Guattari’s language, the originally smooth space of wilderness is striated, i.e. inscribed with a network of communication routes that allow resources and materials to be extracted and transported (Deleuze & Guattari 1980: 479). Accordingly, cities can be seen as sites of coordinated and continued human activity, hubs of human civilisation embedded on the surface of the planet to extract resources and regimentise material and biopolitical fluxes.



Fig. 1. A wild goat “invasion” took place in Llandudno, Wales during the spring 2020 Covid-19 lockdown. The Great Orme wild goats can be described as an “alien species,” for they are the descendants of Kashmiri goats that were imported from Northern India to Britain in imperial times. There are no natural deterrents to the multiplication of the species in the Great Orme headland, which is a conservation area, and the population is managed through culling and sterilization. Emboldened by the reduction of human activity, a heard of goats repeatedly visited and caused some mischief in the Llandudno town centre. Subsequent lockdowns prevented the park wardens from carrying out planned population control measures, which bolstered the goat population and triggered further “invasions.” Photograph by Gareth llanrug, 16 April 2020, CC BY-SA 3.0.

Henri Lefebvre described urbanisation as part of a broader historical process in which deeper social structures organically inform the production of space (Lefebvre 1974). In Lefebvre’s reading of the way space emerges, the set of relationships that a community establishes with nature forms a matrix that becomes visible through the continuously renewing built environment, and infrastructure dedicated to extracting and managing resources. The city is a surface-level, “concrete abstraction” of that underlying matrix. Since Lefebvre, urban theory continued to examine the multiple

actors and forces that take part in this process. Processes can be perceived as chaotic when the level of interactive complexity prevents a thorough mapping of fundamentals, conditions, and agencies. Intentionality unfolds itself in the interactions between the different elements of this meshwork in different forms, for instance by proxy or asynchronously over time.

The role of technology, understood as the cultural repository of techniques that can be learnt by teaching or imitation, is a crucial medium and document. The use of technology that people make forms a constantly pulsating, selective interface between a community and its spatial situation. For the archeologist André Leroi-Gourhan, technology represents a sort of envelope whose outermost, most visible layer is made of artefacts and other things invested with cultural significance. He wrote of “technological tendencies” that emerge from the human side of the interface, the cultural one, and proceed towards the environment that surrounds a human group (Leroi-Gourhan 1945). A community’s perception and understanding of the world is therefore screened or affected by a technology, but once the latter is developed, it will then also influence the way individuals behave and interact with each other. This envelope of objects therefore embodies and projects the ambitions and the self-perception of a community. As a constituent part of culture, technology can be transmitted between individuals and groups through formal instruction or participant imitation. New technologies typically bring about unexpected consequences that span beyond the immediate needs they were initially conceived to respond to, and engender new patterns of behaviour in users. The engineers might be the depository of the specialist knowledge that is enclosed within the technological black box; meanwhile, use and appropriation are not precluded and an observer can through technographic writing describe how individuals and groups develop and deploy both the techniques and the tools that embody those techniques. Leroi-Gourhan’s envelope of objects returns a representation of culture, and in the process it also reflects the meanings associated with social constructs and discursive inventions such as nature. When the genealogical connection that links a socio-technical vision and the worldview that originally informed it is eroded in the course of historical change, its products are left surviving, still justified by their very existence, by the very thing power they are able to shift (Hongladarom 2002). These products include behav-

iours, artefacts, and spaces for inhabitation, as much as institutions and policies (Rossmann 2017).

In “Ideas of Nature,” the cultural critic Raymond Williams examined the way nature was constructed and represented in time, and how humans “come to project on to nature their own unacknowledged activities and consequences.” Nature, Williams recounts, was represented in different times and places as singular and abstracted. It was portrayed as a “selective breeder” in evolutionary thought in the eighteenth and nineteenth centuries. It was seen as absolute wilderness in the environmentalist thought of the nineteenth and twentieth century, where it functions as a discursive shortcut to represent all that is yet untouched, unspoiled by humans. When Williams reconstructs this narrative of human activity as processing a pure nature into products for use and byproduct in forms of waste and nature blight, he extends the parallelism to immaterial activities too. The creation and maintenance of society, the entertaining of “relations between men and men,” also counts as a product whose project and construction will result in a series of collateral byproducts. These byproducts, Williams concludes, include the very opposition between the domains of the human-made and the natural. Society, in other words, is the very origin of the human alienation from nature that drives the artificial vs. natural dualism (Williams 1980: 84).

While Williams was writing his essay in the mid 1970s, some radical fringes of the counterculture were abandoning cities and communes in acts of ‘voluntary primitivism’ that involved rejecting not only the amenities and appliances of a standard middle class home, but even the concept itself of a human dwelling, preferring to live solitary existence in groups of a handful of individuals. The story is recounted and contextualised by Felicity Scott in her ample *Outlaw Territories* (2016: 126). The experience of these “intentional primitives,” often students abandoning design schools to build on open land with found materials, was an ideal corollary to Williams’s thinking. It was also a lived experience of the perhaps all too literal attempt to overcome that opposition by collapsing the two domains together instead of charting and celebrating their entanglements.

Despite its seemingly radical articulation, Williams’s cultural historical reading in fact channels a broader tradition in European urban theory that stems from the

foundational Vitruvian texts and was received through Leon Battista Alberti's writings. This thinking saw the city as a self-contained unit embedded in a landscape from which it extracts its sustenance through activities including forestry and agriculture. The illustrative typology of this environmental programme is the burg or borough (it. *borgo*), words both related to the Indo-European root **bhergh-*, which referred to the acts of hiding away or protecting. The root and its meaning are shared by words still in use in most Indo-European languages to refer to types of settlements. The burg is a citadel or human settlement separated from its surroundings, equipped with a market or other infrastructure, and enclosed within the city walls (fig. 2). The space inside the burg walls is typically used for financial or industrial profit-making activities such as trade, banking, and craft. The wall is the infrastructure that separates the burg from the outside, the open environment, and it functions as an osmotic membrane. It is a selective interface. The ultimate function of the burg is to protect its inhabitants and secure the continuity of their life and possessions from the uncertainty represented by wild nature and other uncontrollable forces such as weather and climate, or unannounced and potentially unfriendly contact with foreigners. The relationship the burg entertains with its surrounding natural environment is informed by an understanding of wildlife as a resource to be tapped into for the improvement of human condition. This programme is established through an act of partitioning, and implemented by selectively allowing materials and individuals in or out of the inside.

An implication of Williams's thinking on the history of the notion of nature is that the basic unit of a human community is constituted by a group of individuals looking at each other, and arranged as a circle forming an inside and an outside. The city form would translate this social arrangement into spatial polarities: the civilized and the wild; the cosy indoors and the great outdoors; environmental conservation and the tragedy of the commons; the insurance policy and the unplanned, unimaginable event defined in legal jargon as act of God; the institution of the contract and the escape route of the force majeure.

In early modern Europe, the romantic imagery of wilderness formed itself by a process of cultural interfacing through framed viewing (Morton 2009). Views were articulated through genres such as travel journals and landscape painting. The message of a green landscape lost to industrial estates and pollution was also embedded

in the artefacts of an age, in a way that unwittingly dons them an aura of totemic replacement. The historian Joel Pfister closely studied the nature-themed decorations on early industrial products made in North America, and found the messages therein inscribed chiming in with tropes found in literature of the same period, describing a sense of loss of nature and fall from grace (Pfister 2000). In Victorian England, the designer and political activist William Morris, who lamented the blight inflicted on green landscapes by mechanised manufacturing, also expressed his views both through his writing and his nature-fetishising textile and wallpaper designs.

As industrialisation more deeply changed urbanisation patterns, this totemism of wilderness also became articulated through garden designs such as the English “wilderness gardens,” or the “Rousseau islands.” The latter typology was inspired by the Rousseauian trope of the noble savage, which took a patronising view on tribal



Fig. 2. The burg is a human settlement enclosed within a wall, an infrastructure that separates it from the open environment and functions as an osmotic membrane. Aerial view of Monteriggioni, Tuscany, Italy. Photograph by Maurizio Moro, 14 July 2020, CC BY-SA 4.0.

societies and constructed them as inhabitants of idealised unspoiled pre-modern landscapes. These typologies were developed upon and expanded in scale by a generation of city planners and landscape architects such as Joseph Paxton in the United Kingdom or Frederick Law Olmsted in the United States. The aim of public parks and open spaces was to improve the health of city dwellers, especially the masses of the urban proletariat, which with universal suffrage was becoming an increasingly relevant actor in the political process. Ebenezer Howard's Garden City model moved up from the scale of the urban garden to the fully-fledged settlement. The work of these practitioners was informed by the ideas of the hygienist movement and the miasma theory, which as opposed to germ theory, postulated disease spread through "bad air" in crowded quarters and ill ventilated slums.

By the mid twentieth century, the volume of the spills between the domain of the human-made and the domain of the natural, and their magnitude was seen to call into question the ability of human technology to control the forces of nature; the extent to which human intervention on the environment is legitimate, and the cases in which it is indeed beneficial or necessary. These questions concern the very position of humankind within the planet's ecosystem. They directly address the practice of urbanisation understood as a coordinated set of interventions on the environment, and translation of human aspirations into a material culture. An innovation introduced in the immediate wake of the Second World War, compared to the previous environmentalist discourse that had been triggered by the advent of the industrial age, was the argumentative use of statistical data and scientific language to reinforce the visions of the balance in peril and the threat looming on the ecosystem (Robertson 2012). This approach is illustrated by Rachel Carson's *Silent Spring*, a book published in 1962, is a detailed account of the effects of the use of pesticides on wildlife. In the book, Carson lyrically describes an upcoming barren natural landscape from which birdsong has literally disappeared, before diving head on into a meticulous catalogue of industrial pollutants, and a painstaking description of their effects on creatures small and large. Over the rest of the 1960s, DDT and most of the other substances mentioned in *Silent Spring* were banned worldwide.

The conservation legislation that was inspired by the early environmentalist movement, and introduced in industrialized countries from the 1960s onwards, expands the process of spatial nature-culture separation to the scale of the legal framework. It

contrasts the areas where humans dominate the landscape with wilderness and establishes ecological segregation as a legislative environment in order to protect the latter. In the United States, the language of the 1963 Wilderness Act prescribes human presence in wilderness areas be limited to temporary visits. Hence, there would be neither human habitation, nor road traffic and permanent infrastructure. The imprint of human intervention, the 1963 Wilderness Act mandates, should be minimised or removed. Wilderness is ultimately represented as an undomesticated, untamed space beyond human control. Environmental protection legislation and the 1970s emergence of ecologically minded urban planning and design contributed to the rise of polarised cities that are ecologically segregated as much as they are socially segregated (Owens et al. 2019).

Initially, European Union policy directly followed the US example, which was informed by the popular wave of concern that reached critical mass with the publication of *Silent Spring*. The first piece of legislation that directly addresses environmental concerns was the Birds Directive, which was adopted by member states in April 1979. Over the 1980s, commitment to the protection of ecosystems expanded beyond the sphere of sight and sound to finally include 200 entire types of habitat along with maintained lists of critically endangered animal and plants species (1992). The next phase of EU regulation focused on animal welfare, with directives on the living conditions of wild animals kept in zoos (1999), and the techniques used to catch wild animals that do not meet “humane trapping standards” (1991).

The EU Regulation on Invasive Alien Species was adopted in 2014 and updated several times until 2019. The act provides a legal framework for defining “alien species” whose status after “early detection” can also be escalated to the “alien species of Union concern” level. The regulation refers to a maintained list of species and provides for a number of strategies to hold them back from establishing themselves. Containment is defined as “any action aimed at creating barriers,” which can also be contained holding when an “organism” is detained “in closed facilities from which escape or spread is not possible.” Populations can be “managed” through “control” or “eradication,” in both cases through “lethal or non-lethal means.”

The language used displays an emphasis on “native” species “taking back control” even if that control will be exercised only within the limits of the reserve established

by the previous directives (Ward 2019). This nativism also betrays a cultural construction of mobile wildness (as opposed to designated spaces of wilderness) as fundamentally irreconcilable with urbanisation (Owens et al. 2019).

While policy-making and legislation represent a horizon of articulation and validation (Hausstein & Lösch 2020), urbanisation and communication are the parallel fields where the narration of a vision socially unfolds. Short and long-term events such as local lockdowns and climate change create the conditions for a more visible blurring of the culturally constructed boundary between urbanisation and designated wilderness. Climate-driven change to the fundamentals of ecosystems result in the emergence of both “climate refugee” species that migrate from habitats rendered inhospitable, or “opportunistic” species that expand their scope at the expense of biodiversity (Owens et al. 2019). These dynamics exacerbate conflicts between human and non-human species. They also multiply opportunities for close encounters that are documented through citizen science devices such as camera traps or nature webcam (fig. 3), social media, or recognition apps (Owens et al. 2019). All these formats allow for second-order scrutiny of metadata that can be fed into machine-learning pattern recognition, which adds a further dimension to the potential of social imagery in shaping the designated space for wilderness as it shapes its aesthetics.

This visual material feeds rewilding scenarios that also discuss potential futures for the city as a form of settlement. These scenarios are by definition future-ward, and fall along an ideal spectrum bookended by land abandonment on the one side, and active rewilding on the other one (Carver 2019). The former are inspired by the example of passive rewilding and involuntary parks formed by areas where human access is forbidden, impractical, or economically unviable. In such areas, including ruin complexes, military buffer areas, and exclusion zones, passive rewilding takes place spontaneously and over generations of pioneer species. Wildlife eventually proves more resilient than human-made artefacts. As a consequence, when these visions of rewilding are portrayed and narrated in still or moving images, they provide definite purchase to those instances of visioneering in which land is abandoned in order to let wildlife return to spaces lost to urbanisation and thrive (Monbiot 2014; Hall 2019). At the other end of the spectrum there are more interventionist scenarios that postulate the re-establishment of an ideal past state of the ecosystem. Choice of which state falls more or less arbitrarily on the pre-atomic age, the pre-industrial revolution

one, up to the more radical Pleistocene rewilding proposal. Pleistocene rewilding seeks to reach consensus on returning landscapes to the status that they are currently known to have been in before the agricultural revolution in the Neolithic and the extinction of the megafauna.

From this point of view, the negative visual canon of the Anthropocene age of extinction can be read as imbued with a message of dissatisfaction with the state of things because borne of the human beholder's discontent. Wildlife is driven to the brink of survival and decimated, it is deprived of the resources needed to lead a good life, and ultimately forced into degrading practices such as filling their own bodies with plastic and other alien, toxic refuse that humans cavalierly leave in their wake. At this sight, the human audience is dissatisfied with the bad spectacle offered by the blight of nature because it does not meet the standard of the kind of relieving experience that nature is expected to provide to the human senses. The urge for meaningful co-existence between human and non-human species (Hildyard 2017; Coccia 2019) is



Fig. 3. Feeding time. On 9 March 2020, a couple of peregrine falcons nested on top of the Tower Building in North London. The building is part of London Metropolitan University, which installed a webcam to stream live footage of the falcons and their four chicks. Screenshot taken on 25 April 2021. Courtesy of London Metropolitan University.

borne of an allied concern for granting to non-human species a sanctuary outside the sphere of human control, and return to those species the expressive freedom that would come along with the sacred grounds (Ward 2019).

Depending on the observer's position, the Anthropocene should be a time of collapsing walls or wide open gates. Anthropocene fluxes are a two-way exchange and entropic mixture. Seen through the portholes punched into the walls of the burg, it involves rising waters, fast-travelling tornados, and hordes of semantically unfriendly *invasive species*. On the other side, it involves arbitrary eutrophic climate change, and force-fed diet of macro and microplastics. While these spills between the discursive domains of the human-made and the natural are easier to acknowledge, it can be argued that they are not a novel fact and the entanglement between cities and nature is organic, and, perhaps most importantly, that it predates modernity (Soens et al. 2019: 3-7).

References

- Carver, Steve. 2019 “Rewilding through Land Abandonment,” in Nathalie Pettoelli et al. eds. *Rewilding*, Cambridge: Cambridge University Press. pp. 99–122.
- Coccia, Emanuele. 2019. *The Life of Plants: A Metaphysics of Mixture*. Cambridge: Polity Press.
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [1992] OJ L206/7.
- Council Directive 1999/22/EC of 29 March 1999 relating to the keeping of wild animals in zoos [1999] OJ L94/24.
- Council Regulation (EEC) No 3254/91 of 4 November 1991 prohibiting the use of leghold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leghold traps or trapping methods which do not meet international humane trapping standards [1991] OJ L308/1.
- Daly, Natasha. (2020, March 20). “Fake animal news abounds on social media as coronavirus upends life,” *National Geographic*, retrieved from <https://www.nationalgeographic.com/animals/article/coronavirus-pandemic-fake-animal-viral-social-media-posts> [Accessed on 7 May 2021].
- Deleuze, Gilles & Félix Guattari. 1988 (1980). *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone.
- Denizen, Seth. 2020. “The Flora of Bombed Areas: An Allegorical Key,” in Matthew Gandy and Sandra Jasper, eds. *The Botanical City*. Berlin: Jovis, pp. 38-45.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) [2010] OJ L20/7.
- Fallan, Kjetil. ed. 2019. *The Culture of Nature in the History of Design*. Abingdon, Oxon: Routledge.
- Garford, Lisa. 2018. *Green Utopias: Environmental Hope Before and After Nature*. Cambridge: Polity Press.

- Gugger, Harry & Bárbara Mações Costa. 2014. "Urban-Nature: The Ecology of Planetary Artifice," *San Rocco* 10: 32-40.
- Hausstein, Alexandra & Andreas Lösch. 2020. "Clash of Visions: Analysing Practices of Politicizing the Future." *Behemoth: A Journal on Civilisation* 13 (1): 83-97.
- Hall, Marcus. 2019. "The High Art of Rewilding: Lessons from Curating Earth Art," in Nathalie Pettorelli et al. eds. *Rewilding*, Cambridge: Cambridge University Press. pp. 201-21.
- Hildyard, Daisy. 2017. *The Second Body*. London: Fitzcarraldo Editions.
- Hongladarom, Soraj. 2002. "Cross-Cultural Epistemic Practices." *Social Epistemology* 16 (1): 83-92.
- Kowarik, Ingo. 2020. "Urban Cemeteries in Berlin and Beyond: Life in the Grounds of the Dead," in Matthew Gandy and Sandra Jasper, eds. *The Botanical City*. Berlin: Jovis, pp. 305-313.
- Latour, Bruno. 2017. *Facing Gaia: Eight Lectures on the New Climatic Regime*. Cambridge: Polity Press.
- Lefebvre, Henri. 1991 (1974). *The Production of Space*. Oxford: Blackwell Publishing.
- Leroi-Gourhan, André. 1945. *Milieu et techniques*. Paris: Albin Michel.
- Monbiot, George. 2014. *Feral: Rewilding the Land, the Sea, and Human Life*. Chicago: University of Chicago Press.
- Morton, Timothy. 2009. *Ecology without Nature: Rethinking Environmental Aesthetics*. Cambridge, MA: Harvard University Press.
- Owens, Marcus & Jennifer Wolch. 2019. "Rewilding Cities," in Nathalie Pettorelli et al. eds. *Rewilding*, Cambridge: Cambridge University Press, pp. 280-302.
- Pfister, Joel. 2000. "A Garden in the Machine: Reading a Mid-Nineteenth-Century, Two-Cylinder Parlor Stove as Cultural Text," in Jules David Prown and Kenneth Haltman, eds. *American Artifacts: Essays in Material Culture*. East Lansing, MI: Michigan State University Press, pp. 149-166.

Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species [2014] OJ L317/35.

Robertson, Thomas. 2012. "Total War and Total Environment: Fairfield Osborn, William Vogt and the Birth of Global Ecology." *Environmental History* 17: 336-364.

Rossmann, Maximilian. 2020. "Vision as Make-Believe: How Narratives and Models Represent Sociotechnical Futures." *Journal of Responsible Innovation*, 1–24.

Rutz, Christian, Matthias-Claudio Loretto, Amanda E. Bates, Sarah C. Davidson, Carlos M. Duarte, Walter Jetz, Mark Johnson, Akiko Kato, Roland Kays, Thomas Mueller, Richard B. Primack, Yan Ropert-Coudert, Marlee A. Tucker, Martin Wikelski & Francesca Cagnacci. 2020. "COVID-19 Lockdown Allows Researchers to Quantify the Effects of Human Activity on Wildlife," *Nature Ecology & Evolution* 4: 1156-1159.

Scott, Felicity D. 2016. *Outlaw Territories: Environments of Insecurity / Architectures of Counterinsurgency*, Zone Books, New York.

Searle, Adam, Jonathon Turnbull & Jamie Lorimer. 2021. "After the Anthropause: Lockdown Lessons for More-than-Human Geographies," *The Geographical Journal* 187: 69-77.

Soens, Tim, Dieter Schott, Michael Toyka-Seid & Bert De Munck. 2019. *Urbanizing Nature: Actors and Agency (Dis)Connecting Cities and Nature Since 1500*. Abingdon, Oxon: Routledge.

Von der Lippe, Moritz. 2020. "Vegetation as Testimony: Botanical Traces of the Urban Past," in Matthew Gandy and Sandra Jasper, eds. *The Botanical City*. Berlin: Jovis, pp. 46-53.

Ward, Kim. 2019. "For Wilderness or Wildness? Decolonising Rewilding," in Nathalie Pettorelli et al. eds. *Rewilding*, Cambridge: Cambridge University Press, pp. 34–54.

Williams, Raymond. 1980. "Ideas of Nature," in *Problems in Materialism and Culture*. London: Verso, pp. 67-85.

