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Martin Drenthen
Jozef Keulartz *Editors*

Old World and New World Perspectives in Environmental Philosophy

Transatlantic Conversations

Springer

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Preface

The field of environmental philosophy has its base primarily in North-America, and many of its central topics and approaches clearly reflect a North American perspective on environmental issues, for instance regarding the importance of the concept of wilderness, a concept the relevance of which is not obvious in Old World contexts such as Europe.

Since 2004, the *International Society for Environmental Ethics* and the *International Association for Environmental Philosophy* organize their annual joint meeting in Allenspark, USA, in the heart of the Colorado Rocky Mountains. The Rockies are a beautiful location for an environmental philosophy conference, but locations tend to direct the attention to certain issues while ignoring others. Therefore, in 2010 it was decided that henceforth the meeting should be held biannually on alternating locations.

The intended establishment of a European Network for Environmental Ethics in 2011 provided an excellent opportunity for us to volunteer and organize the 2011 joint meeting in The Netherlands. We hoped the conference would result in a stronger involvement of European environmental philosophers to the field. Central theme of the conference was "Old World and New World Perspectives on Environmental Philosophy."

Luckily, the choice for Europe as a location did not put off many US-based scholars. On the contrary, the location proved to be one of the factors that made this into one of the largest and most diverse environmental philosophy conferences of the last few years.

The city of Nijmegen, in the Netherlands, is over 2,000 years old, and lies close to the German border at the borders of the Rhine River. The venue itself, 'De Holthurnse Hof', is a former estate that is surrounded by a centuries-old cultural landscape with a mix of farmland and woods, and a designated Natura 2,000 area. The hilly terrain was formed by a glacial moraine in the last ice age and contains many signs of history: ancient Roman clay pits, roads and aqueducts, remnants of mediaeval castles and villages, signs of nineteenth century romanticism, and remains of the Second World War, when one of the biggest WWII battles, Operation Market Garden, took place in these surroundings.

The venue provided a perfect location to discuss a wide variety of topics in their real life context. The program featured site visits to a demonstration project of the 'Dutch Society for the Conservation of the Cultural Landscape' (showing how landscapes can be improved making use of traditional land use practices) and to an experimental rewilding project along the borders of the Rhine: 'new wilderness'. The conference program contained sessions on topics ranging from rewilding in old European cultural heritage landscapes, to animal ethics, environmental virtue ethics, but also dealt with the new challenges posed by rapid changes in the world: ethics of climate change, land grab, fresh water ethics, and environmental justice.[1]

The conference program featured several themed sessions on differences and commonalities between Old World and New World perspectives on environmental philosophy. The essays in this book are reworked versions of some of these papers.

We wish to thank ISEE, IAEP, the Dutch School for Research in Practical Philosophy in the Netherlands, and the Institute for Science Innovation and Society at Radboud University Nijmegen for their financial support to the conference.

We wish to thank Jan Fliervoet for all his work in organizing the conference, and Hylke van der Wijst for her assistance in the editing process.

Nijmegen, The Netherlands

Martin Drenthen
Jozef Keulartz

[1] The contributions that focused on environmental aesthetics are collected in M. Drenthen & J. Keulartz: Environmental Aesthetics, Crossing Boundaries and Breaking Divides. New York: Fordham University Press, 2014.

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Contributors

W.S.K. (Scott) Cameron, Ph.D., is a Canadian born on the prairies and raised in Northern Ontario. Scott left Queen's University to counsel alcoholic youth in Thunder Bay before pursing his Ph.D. at Fordham University among the workaholics of New York City. That ended, he took a 1-year post at Loyola Marymount University in Los Angeles where he continues to teach and do research in his 18th year. While his early work tied hermeneutics to critical theory, a sabbatical allowed him to develop his current interest: using hermeneutical tools to resolve longstanding perplexities in environmental philosophy.

Glenn Deliège is a postdoctoral researcher at the Institute for Science, Innovation & Society, Radboud University Nijmegen (The Netherlands). He holds both an M.A. and a Ph.D. from the Institute of Philosophy, KU Leuven, and specializes in environmental philosophy, in particular preservation and restoration issues. His Ph.D. project concerned the valuation of nature in nature conservation practices. He previously published papers in *Environmental Ethics***,** *Environmental Philosophy***,** and *Environmental Values*. He has been guest editor of a themed issue of the journal *Ethical Perspectives* (14 (4)) on *Environmental Philosophy After the De(con) struction of Nature***.** Currently he is working on a research-project (led by Martin Drenthen) which aims at developing a hermeneutic landscape ethics, focussing on the relations between ecological restoration and rewilding landscapes, cultures of place, and moral identity.

Martin Drenthen Ph.D., is Associate Professor of Philosophy at Radboud University Nijmegen. He has published in *Environmental Ethics*, *Environmental Values* and elsewhere about the significance of Nietzsche's critique of morality for environmental ethics, the concept of wildness in moral debates on ecological restoration, and ethics of place. He is author of *Bordering Wildness. The Desire for Wilderness and the Meaning of Nietzsche's Critique of Morality for Environmental Ethics* (2003, in Dutch). He co-edited *Ethics of Science Communication* (2005, in Dutch); *New Visions of Nature. Complexity and Authenticity* (Springer 2009); *Place, Philosophical Reflections on Connectedness with Nature and Landscape* (2011, in

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Marcus Hall (Ph.D., University of Wisconsin, 1999) is Senior Lecturer of Environmental History at the University of Zurich. Before moving to Europe, he was Assistant Professor of History at the University of Utah, where he held the Environmental Humanities Research Professorship. In his research projects, Hall is pursuing various transatlantic questions that involve malaria, warfare, exotic species, conservation salvage, and environmental restoration. His books include *Earth Repair: A Transatlantic History of Environmental Restoration* (Virginia, 2005), winner of the Downing Book Award; *Restoration and History: The Search for a Usable Environmental Past* (Routledge, 2010; edited); and *Nature and History in Modern Italy* (Ohio, 2010; co-edited). He currently serves on the executive committee of the American Society for Environmental History and on the editorial board of *Environment and History*.

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Alan Holland is Emeritus Professor of Applied Philosophy at the University of Lancaster, UK. After a former focus on topics in epistemology and philosophical logic, he has latterly published work in a variety of more 'applied' fields, including environmental philosophy, ecological economics, animal issues, medical ethics and the theory of evolution. He was founding editor of the journal *Environmental Values*, and has served on the UK government's 'Animal Procedures Committee'. He is currently working on issues related to meaning in life, the concept of the 'unnatural', and on how to talk about the experiences of animals.

Marion Hourdequin (Ph.D., Duke University) is an Associate Professor of Philosophy at Colorado College in Colorado Springs, Colorado. Her research focuses on the philosophy of ecological restoration, the ethics of global climate change, and the relationship between empathy and ethics. She has published work in a variety of journals, including *Environmental Ethics*, *Environmental Values*,

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Simon P. James came to environmental philosophy by a roundabout route, taking a B.Sc. in Biological Sciences, followed by an M.A. in the History and Philosophy of Science, before obtaining a Ph.D. (for a thesis on Heidegger and environmental ethics) in 2001. He is currently a Senior Lecturer in Philosophy at Durham University. James has worked on a wide range of topics in environmental philosophy, from Buddhist approaches to wildlife conservation to our moral relations with rock formations, and from the (so-called) problem of animal minds to the virtue ethical question of whether a good life must be a green life. His work has appeared in journals such as *Inquiry*, *Environmental Ethics*, *Environmental Values* and the *International Journal of Philosophical Studies*, and he has authored several books – namely, *The Presence of Nature: A Study in Phenomenology and Environmental Philosophy* (Palgrave-Macmillan, 2009), *Zen Buddhism and Environmental Ethics* (Ashgate, 2004), and (with David E. Cooper) *Buddhism, Virtue and Environment* (Ashgate, 2005).

Jozef Keulartz was Associate Professor of Applied Philosophy at Wageningen University and Research Centre and appointed special chair for Environmental Philosophy at the Radboud University Nijmegen. He has published extensively in different areas of science and technology studies, social and political philosophy, bioethics, environmental ethics and nature policy. His books include *Die verkehrte Welt des Jürgen Habermas* (*The Topsy-Turvy World of Jürgen Habermas*, 1995), *Van bestraffing naar behandeling* (*From Punishment to Treatment*, 1996, 4rd ed), *Struggle for Nature – A Critique of Radical Ecology* (1998), and *Werken aan de grens – een pragmatische visie op natuur en milieu* (*Boundary-Work: A Pragmatist View on Nature and Environment*, 2005). He is editor of *Wilhelm Dilthey: Kritiek van de historische rede* (*Wilhelm Dilthey: Critique of Historical Reason*, 1994) and co-editor of *Foucault herdenken* (*In Memory of Foucault*, 1995), *Museum Aarde* (Museum Earth, 1997), *Pragmatist Ethics for a Technological Culture* (2002), *Legitimacy in European Nature Conservation Policy* (2008), *New Visions of Nature* (2009), and *Environmental Aesthetics. Crossing Divides and Breaking Ground* (Fordham University Press, 2013).

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Thomas Thorp is Professor of Philosophy at Saint Xavier University in Chicago where he combines his research on Homer and archaic Greek political philosophy with an abiding interest in wilderness ontology. In addition to essays in both of those areas, Thorp is the author—with Brian Seitz—of the book *The Iroquois and the Athenians*: *A Political Ontology***,** and is currently completing a book based on the essay published here, *Eating Wolves: a philosophy for the American Wes*t. He is Founding Director of Greater Yellowstone College, a consortium of leading environmental philosophers supporting interdisciplinary research in the Yellowstone ecosystem, and he directs The Yellowstone Project, a cooperative program with The Yellowstone Association Institute offering accredited winter and summer fieldwork opportunities for undergraduates.

Chapter 1
Introduction

Martin Drenthen and Jozef Keulartz

1.1 Introduction

Environmental philosophy has its roots in the New World. Even though some European philosophers (for instance Hans Jonas) have long been involved in thinking about the environmental crisis, the earliest philosophers concerned with environmental problems typically came from North America and Australia (Val and Richard Routley, Holmes Rolston III, Christopher Stone, to name just a few). As a result, many of the philosophical debates about conservation and preservation of nature have been highly influenced by New World preoccupations, such as with the concept of wilderness. Famous authors like John Muir, Henri Davis Thoreau, and Aldo Leopold have deeply influenced public self-understanding of the human nature relationship in the New World. The idea of wilderness is deeply connected with the frontier – the wild world is the land of endless possibilities, the place of freedom where everything is still possible: in wildness lies the preservation of the world.

Compared to this New World attitude with its energetic, activist approach to politics and its general sense of optimism, the Old World of Europe might appear to some as tired. Certainly, there is a sense of weariness or historical relativism in the way Europeans tend to think of themselves. Cultural diversity lies at the core of the European identity. Moreover, European culture is a deeply historicized culture, and conversely, the European landscape a deeply historical landscape.

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Moreover, Europeans tend to be more aware of the fact that they have a long history, and that many of the things we aspire today have been aspired before.

Add to that other differences, such as the strong tradition of analytic philosophy in North-America and Australia, with its emphasis on universalistic approaches and concepts, and the importance of continental thought within Europe, with its emphasis on language, history and plurality. As much as these differences can divide environmental philosophers across the globe, they can also be a source of fruitful exchange; the different approaches can learn from each other and challenge each other's blind spots.

But, despite these differences, both New World and Old World approaches struggle with the same kind of problems. On the one hand, the New World idea of a pristine wilderness devoid of human effects has been deflated when it became apparent that many wilderness areas had been profoundly affected by humans before European conquest and settlement. On the other hand, it is clear by now that preserving the typical Old World cultural-historic landscapes is becoming more and more expensive and difficult.

In this introduction we will first sketch the main difference between Old World and New World approaches, and show that both approaches struggle with similar problems (1.2). Next, we will indicate how New Worlders and Old Worlders respond to these problems (1.3). And finally, we will give a brief outline of this volume (1.4).

1.2 Primitive and Pastoral Arcadia

New World and Old World conservationists use different baselines. Ecological restoration in the New World comes down to returning habitats or ecosystems to the way they were when Europeans arrived to settle the area – for North America the year 1492 is a holy baseline, for Australia it is 1770 when Captain Cook first landed there. Ecological restoration in the Old World on the other hand uses the pre-industrial (and not the pre-settlement) landscape as baseline and aims to return ecosystems to their condition prior to large-scale modernization.

These different baselines correspond to Simon Schama's distinction in *Landscape and Memory* between two kinds of Arcadia, the *primitive* and the *pastoral*. "There have always been two kinds of Arcadia: shaggy and smooth; dark and light; a place of bucolic leisure and a place of primitive panic" (Schama 1995, 517). Whereas primitive Arcadia is inhabited by people who behave like wild animals, pastoral Arcadia is a place from which all dangerous creatures (such as the snake and the lion) have been banned and the ideal animals (such as the cow and the bee) behave like conscientious and industrious citizens. Primitive Arcadians are "hunters and gatherers, warriors and sensualists" (ibid., 527), who seek shelter against the elements in caves or simple huts; pastoral Arcadians, on the other hand, are agriculturists, who have replaced hunting and gathering by farming and herding, and who have exchanged nomadic life for sedentary life.

1.2.1 A Post-Wild World

The contrast between primitive and pastoral Arcadia, between the hunter-gatherer who is supposed to live a hand-to-mouth existence, never staying long enough in any one place to leave lasting human imprints, and the agriculturalist who completely transforms wildland environments, has had a profound impact on the American perception of wilderness as a pristine nature devoid of human effects.

As Kat Anderson has noted in her book *Tending the Wild* about native American knowledge and the management of California's natural resources, early European and American explorers and settlers saw in California's landscape an ever-full horn of plenty that gave the native people no need to be industrious. "In their eyes, native people were merely the reapers of this abundance, not the sowers" (Anderson 2006, 241). But this was a totally false impression, because without an Indian presence, these early explorers and settlers would have encountered with less spectacular wildflower displays, fewer large trees, fewer park-like forests, vast grasslands et cetera. Instead of a pristine, virtually uninhabited wilderness, they had arrived in "a carefully tended 'garden' that was the result of thousands of years of selective harvesting, tilling, burning, pruning, sowing, weeding, and transplanting" (ibid., 125/6).

A case in point is one of the great symbols of American wilderness, Yosemite Valley, established in 1864 as the nation's first natural park. This valley was occupied by the Miwok Indians till 1853, when they were evicted from the valley in the interest of gold miners. Soon after their expulsion it became clear that their land management practices, especially those involving burning, had an important ecological impact. The lack of burning led to the accumulation of detritus and bush which in turn made for much more violent fires and ruined the very scenic views that were meant to be preserved (Olwig 1996).

The cult of pristine wilderness, where indigenous people, under the influence of late-nineteenth century anthropologists, were considered as part of the fauna – 'half man, half beast' -, is still popular among many conservationists and the general public, although it has long been exposed as a cultural construction. But the idea that it is time to move beyond romantic notions of pristine wilderness is increasingly gaining ground. As Emma Marris has argued with great passion, to save nature in a post-wild world, we should replace such antiquated notions with "the concept of a global, half-wild rambunctious garden, tended by us" (Marris 2011, 2). Europeans will find this concept attractive because they have always thought of ecological restoration very much as gardening, or even more as farming.

1.2.2 Half-Nature Under Pressure

European conservationists have always had much less seemingly pristine land to work with than their American, Canadian, and Australian colleagues. Here, not the primitive Arcadia of hunters and gatherers was considered the ideal baseline, but the

pastoral Arcadia of farmers and herders. Marris has noted with some amazement that "Europeans even run their dedicated nature reserves a bit like farms" (ibid., 139). Not, however, like modern farms where intensive and industrial agriculture is predominant, but like traditional farms where small-scale extensive agricultural activities have produced picturesque landscapes with a wide variety of plant and bird species.

After the Second World War, the Dutch biologist Victor Westhoff introduced the term *half-nature* to characterize these pre-industrial agricultural landscapes. The management of these landscapes comes down to a continuation of traditional agricultural techniques such as hunting and fishing, reed and brushwood cultivation, tree planting and felling, mowing and turf cutting, the setting up of duck decoys and the use of water mills.

A good example of a pre-industrial agricultural landscape is the inland drift sand landscape of Northwestern Europe. Drift sands represent a typical man-made landscape which emerged with the shift from nomadic farming to sedentary farming and the introduction in the twelfth century of the so-called 'plaggen' agricultural system. Forests were cut to create health lands to be grazed by sheep during the day. Their manure was collected in deep litter stables (the 'potstal') where the animals spent the night. Heather sods (the 'plaggen') were cut and used as bedding material in the deep litter stables where it was soaked by the manure. The mixture of manure and sods was used to fertilize the arable fields where rye was grown, the main staple food in those days. This medieval system was a vulnerable system – due to intensive sheep grazing and sod cutting much of the heather disappeared and the bare soil became exposed to wind erosion which initiated sand drifting.

The territorial expansion of the inland drift sand landscape reached its peak in the nineteenth century. But with the introduction of artificial fertilizers and cheap wool from Australia, this landscape was doomed to gradually disappear. Because the use of sheep and sheep-manure was no longer required, extensive heath lands became superfluous; they were reforested or prepared and used for raising crops.

Currently, inland drifting sands are a typically Dutch phenomenon – more than 90 % of Europe's drifting sands, also called 'Atlantic deserts', are found in the Netherlands. Whereas there were still some 80,000 ha of drifting sands in the Netherlands around the middle of the nineteenth century, today only 1,500 ha (2 %) remain. It is increasingly realized that these small remaining areas represent a unique ecosystem characterized by a special floral and faunal composition adapted to extreme environmental conditions.

But the preservation of these drifting sands is under increasing pressure. Climate change has a disruptive impact on plant and animal life. Entire populations are being confronted with the alternative to move outside their historic ranges or to go extinct. This makes it difficult, if not impossible to guarantee the survival of specific target species in specific places. The increased nitrogen deposition, caused by car traffic and fertilizer application, leads to acidification and eutrophication of terrestrial and aquatic ecosystems, and causes open sand areas to become overgrown at an astonishing rate of 3 ha per year, driving back some plants and animals into ever smaller areas.

1.3 Two Opposing Reactions

It is evident that historical baselines or reference states, be they of a more primitive or a more pastoral kind, are always arbitrary. What is more, historical baselines are increasingly being dismissed as irrelevant as strong anthropogenic drivers such as climate change, nitrogen deposition, and habitat fragmentation make it difficult, if not impossible, to preserve or recreate historical ecosystems. There are two widely diverging reactions to this situation: whereas one wing of the restoration movement has abandoned history entirely, shifting the focus from the past to the future, another wing has moved the baseline back to an even deeper, more distant past (see Alagona et al. 2012).

1.3.1 From a Historic to a Futuristic Approach

A growing number of members of the conservation community feel that we have entered an era characterized more and more by so-called 'novel ecosystems' (Hobbs et al. 2013). Novel or non-analog ecosystems may contain new, non-historical combinations of species that arise not only through the impact of the deliberate and inadvertent introduction of species from other regions but also through land-cover change, pollution, and especially through rapid climate change. Because novel ecosystems have unknown functional characteristics, it is virtually impossible to turn back the clock to some prior condition.

In a world that is in ever-greater flux, restoration to a historic standard is becoming more and more anachronistic. It is estimated (by Perring and Ellis 2013) that about 35 % of the world's ice-free land is currently covered by novel ecosystems. Hence the suggestion that we should drop the term 'restoration ecology' with its historical focus, and replace it by the term 'intervention ecology'. This substitution of restoration by intervention signifies a shift from a 'historic' to a 'futuristic' approach to ecosystem management (Choi 2004, 2007; Choi et al. 2008). Rather than looking nostalgically to a past that is impossible to restore, "we should intervene with an eye to the future and toward managing for future change" (Hobbs et al. 2011, 444).

The most important management goal for interventions in novel ecosystems concerns the protection and development of ecosystem services and goods. There is a broad and growing consensus among ecologists that this management goal might be the best alternative for the "nostalgic recompositions of the past" (Choi 2007, 352).

The attractiveness of the concept is understandable in an era of unprecedented global environmental change. On the other hand, as Higgs (2012, 95) has cautioned recently, an approach "that focuses on ecosystem services at the expense of historical fidelity and ecological integrity could look a lot like gluttony" – an over-emphasis on satisfying our own desires. Although the concept of ecosystem services appeals to many in the scientific community and beyond, it may not be a panacea for our current natural resource management ills. The recent rise to ascendancy of the concept of ecosystem services among environmentalists and ecologists may

well have some highly undesirable consequences for both society and nature (see Keulartz 2012, 2013).

It is no coincidence that the concept of novel ecosystems has originated in the New World, because for Europeans novel ecosystems are anything but new. To quote Emma Marris once again: "In places like Europe, I don't think people care as much about novel ecosystems, because they don't have the same obsession with pristineness and purity that the Americo-Australian-Pacific Island group does."[1]

1.3.2 Back to a Deeper Past

Rewilding – the other response to the baseline problem and the growing incapacity to restore historical ecosystems – points in a direction that is diametrically opposed to the one taken by the supporters of a futuristic, forward-looking approach to conservation. Far from abandoning history altogether and dismissing the past as an inaccurate indicator for the future, the rewilders try to reach back to a deeper history.

Whereas the preoccupation with novel, non-analog ecosystems is mainly limited to North America and other parts of the New World, there clearly is growing momentum for rewilding on both sides of the Atlantic.

In North America, Josh Donlan and colleagues (2005, 2006) have launched the idea of 'Pleistocene Rewilding'. They blame most conservationists and management agencies for suffering from a 'post-Columbian bias'. They typically turn to Columbus and the year 1492 for a restoration baseline. If, however, we accept as benchmark for restoration measures the arrival of people from the Clovis Culture, at least 13,000 years ago, we could consider introducing surrogates for some of the North America megafauna that went extinct after the arrival of these people.

Pleistocene rewilders recognize that Earth is nowhere pristine, and that, in fact, human-induced environmental impacts are now unprecedented and show alarming signs of worsening, with the result that the megafauna that has already disappeared from Europe, Australia en the Americas, will eventually also disappear from Africa and Asia, the only places where megafauna are still relatively intact. Given this risk of further extinction, the rewilders propose using megafauna from these regions, such as camels, cheetahs, elephants and lions, as proxies for extinct American species.

On the other side of the Atlantic, rewilding has also gained considerable momentum. Several developments have contributed to the rising enthusiasm for rewilding. One important development was the fall of the Iron Curtain, which revealed large natural areas in Central and Eastern Europe, and created opportunities to turn them into government-protected areas. Another major development was the change in Europe's common agricultural policy, which has led to significant conservation opportunities in depopulated rural areas (Martin et al. 2008).

[1] Quote from interview in Leaf Litter Newsletter, 2011, Vol. IX, Edition 4. http://www.biohabitats.com/newsletters/novel-ecosystems-2/

In Europe, rewilding has gone Dutch, to paraphrase a chapter title of Andrew Balmford's 2012 book *Wild Hope*. Balmford refers to the Oostvaardersplassen, a polder situated 5 m below sea level and just half an hour from Amsterdam. Reclaimed from the sea in 1968, this marshy area of 6,000 ha was initially earmarked for industry, but soon evolved into a perfect habitat for plant and bird species that had become very rare in the Netherlands, or had completely disappeared from the country.

The site became a nature reserve of international importance, where Frans Vera (2009) and his colleagues initiated a management approach of rewilding with large ungulates. In 1983 they introduced 34 Heck cattle and 20 Konik horses, the closest relatives to their extinct wild predecessors, the aurochs and the tarpan respectively. In 2012, a helicopter count revealed about 350 Heck cattle and 1,150 Konik horses alongside 3,400 red deer, that were introduced in 1992. Because of these large numbers of free-roaming ungulates the German magazine *Der Spiegel* has called the Oostvaardersplassen 'the Serengeti behind the dikes.' The rapid adoption of the ideas behind the Oostvaardersplassen project by agencies from other European countries, especially the UK, gives an indication of the influence that the work of Vera and colleagues has had.

Although the rewilding projects on both sides of the Atlantic have much in common, they apply different baselines (see Marcus Hall in this volume). Whereas Donlan and colleagues moved the baseline back to the pre-human past, Vera and colleagues stay closer to human history and use a pre-agrarian baseline; they argue that many species, such as wolves, lynx and bison, have been decimated, or, like the aurochs and tarpan, went extinct altogether as early farming cleared the natural vegetation and gradually replaced it with agriculture.

It is clear from this short overview that there is a growing number of uncertainties with respect to conservation policy and practices on both sides of the Atlantic. Should we go back to pre-human, pre-settlement, pre-agrarian or pre-industrial times? Or should we give up the notion of 'restoration' altogether and instead focus on 'intervention' for the sake of securing the provision of ecosystem goods and services? Should rewilders only facilitate the return of existing animal species, like the wolf, the bear or the lynx, or should they also make use of proxies for extinct animals such as aurochses, tarpans, mammoths and saber-toothed tigers?[2] Doesn't the concept of rewilding reinforce the line between humans and nature, rather than blurring it? And if so, doesn't rewilding represent a serious challenge for traditional cultural ecosystems?

Because these questions are equally acute in the New World and the Old World, it is high time for a transatlantic dialogue, in which experiences and insights with respect to conservation issues can be exchanged. This volume sets out to show what a meeting between Old World and New World perspectives in environmental philosophy can contribute to such a dialogue.

[2] Currently, scientists are trying to bring back extinct animals with the help of synthetic biology. For instance, leading synthetic biologist George Church is working, in partnership with 'Revive and Restore', on a 'de-extinction' project of the Long Now Foundation, to bring back to life the iconic extinct passenger pigeon (*Ectopistes migratorius*). (http://rare.longnow.org/projects.html)

1.4 Outline of This Volume

This volume is divided in three parts of four chapters each. In the first part, the authors take the question of the relation between the New and the Old World perspective on nature and landscape head on. The second part highlights the meaning of ecological restoration in old historical *cultural* landscapes. The third part focuses on wildness, and its representative: the wolf.

1.4.1 Wilderness and Cultural Landscapes

In Chap. 2, Marcus Hall argues that ecological (or environmental) restoration, as the project of repairing damaged ecosystems, is now a worldwide pursuit that poses a range of practical and theoretical challenges. Not only do restorers seek a keen biological knowledge of every ecosystem they hope to restore, they must also settle on restorative goals that are both reasonable and appropriate. Choosing a goal that aims to reproduce an earlier, pre-degraded state can seem arbitrary for some ecosystems, or irrelevant for others, as there are many pre-degraded states, be they pre-industrial, pre-agricultural, pre-Columbian, or pre-human. This chapter focuses on the practice of 'rewilding' on both sides of the Atlantic, aiming to see how it is being practiced differently according to needs, assumptions, and values. A series of historical comparisons across the Atlantic serves as a way to emphasize that rewilding usually means very different things for Europeans and Americans. It is concluded that rewilders generally aim to bring back *wilder*ness in America, whereas they hope to bring back *wild*ness in Europe.

In Chap. 3, Marion Hourdequin and David G. Havlick focus on one of the central worries raised in relation to ecological restoration: the problem of authenticity. Robert Elliot, for example, has argued that restoration 'fakes nature'. On this view, restoration is like art forgery: it deceptively suggests that its product was produced in a certain way, when in fact, it was not. Restored landscapes present themselves as the product of 'natural processes', when in actuality, they have been significantly shaped by human intervention. For Elliott, there seem to be two sources of inauthenticity in ecological restoration. First, the restored landscape is inauthentic because its natural genealogy has been disrupted by the intervention of humans: it has lost its authentic natural identity. Second, the restored landscape is inauthentic because it pretends to be something it is not; it obscures its own history. Hourdequin and Havlick argue that the first sense of inauthenticity is problematic; however, the second concern – about obscuring history – is important. Using case studies involving the naturalization of former military lands, Hourdequin and Havlick tease out more fully the ways in which landscapes can be 'inauthentic' by misleading observers about their genealogy. In such landscapes, it is not departure from 'the original' *per se* that is the source of inauthenticity; rather, restored landscapes fail to be authentic when they deceptively obscure critical elements of their past.

In Chap. 4, Scott Cameron contents that the North American and European perspective on nature conservation both capture essential but partial truths. The North American focus on wilderness occludes two very different perspectives under which the world was 'always already' humanized: the ancient, biblical view of the first humans as co-creators of the world (Adam and Eve as the namers, analogues of which are still common in many aboriginal wisdom traditions), and Nietzsche's post-modern variant celebrating our recreating the world by re-naming and re-valuing it. On both views, the Earth is originally ours, both as home and in trust as our garden. There is, nonetheless, an important warning in the romantic aspiration to commune with nature unsullied. Cameron's goal is to highlight an inescapable but productive tension between understanding the world as already humanized and desiring to respect its inherent value. He stresses that we can achieve the latter only by recognizing the former.

Finally, in Chap. 5, Robert Scotney argues for an alternative conception of wilderness to the so-called 'received wilderness idea'. It defines wilderness as the kind of environment that is free from human control in the sense that it does not have human activity as its dominant shaping feature. Scotney agrees with Callicott and others that the received wilderness idea fails to reflect the reality of natural environments, and is even harmful in some of its applications. But he doesn't agree with these critics that the objections raised against the received wilderness idea necessarily have to lead to the conclusion that the concept of wilderness should be abandoned altogether.

Scotney's alternative definition of wilderness as environments free from human control as their dominant shaping factor does no longer force us to think of wilderness and civilization as sheer opposites. In fact, this definition allows us to recognize the possibility of 'wilderness civilizations', i.e., meaningful human cultures which may develop ways of living in wild environments that adapt to rather than destroy their wildness.

1.4.2 Restoration of Value and Meaning to Cultural Ecosystems

Most philosophical debates on ecological restoration have been strongly influenced by North-American thought, in which the concept of wilderness played a central role. Robert Elliot's and Eric Katz's criticisms of ecological restoration have already been discussed by Hourdequin and Havlick earlier in this book. Both Elliott and Katz argue that the effort to restore nature is doomed to fail because nature (or the genesis of a natural ecosystem) can never be reproduced. Humanly influenced landscapes lack the value that 'original' nature has. Andrew Light and Eric Higgs, among others, have criticized the dualism implicit in Elliot's and Katz's criticism from a pragmatic perspective, but a full philosophical reflection on the value of the human-made, cultural landscape is still largely absent in environmental philosophy.

The second part of this volume seeks to fill this gap, by focusing on a topic that is typical for the historic cultural landscapes that we can find in Europe and elsewhere in the Old World. The perspective that is introduced in this part is also relevant for New World contexts, because on closer inspection, even those landscapes that appear to be pristine wildernesses, have a cultural history of their own.

The cultural landscapes of Europe provide a challenge to many of the influential philosophical ideas regarding ecological restoration. What if what is being restored is *not* an untouched natural system, but a humanly created testimony, a product of history? What if these restored landscapes are valuable not just because of their natural values but also because of their cultural significance? Does that turn them into mere human artifacts, comparable to artworks, buildings and the like? If so, then why should we talk about ecological restoration in the first place, and not merely about the restoration of cultural landscapes? Or does nature still have a meaning in the contexts of cultural landscapes?

The authors of this part argue, each in their own way, that these old cultural landscapes are not merely artifacts, but that they testify to a complex interaction between humans and nature, which has moral significance as well. The meaning of these cultural landscapes cannot be fully grasped by referring to their ecological value, but is neither exhausted by their cultural-historical meaning. Instead, these landscapes are hybrids, that testify to the various ways in which human history and the natural world are deeply interrelated. Philosophical debates about practices of ecological restoration so far have neglected these Old World landscapes, and the practice of restoring cultural ecosystems.

In Chap. 6, Paul Knights argues that there are reasons for a critical reassessment of two current movements in UK conservation – 'creative conservation' and 'rewilding' – that emerge from an examination of the ontological, axiological and ethical status of restored cultural ecosystems. He first argues that the famous criticism advanced by Robert Elliot against the ontological status of restored *natural* ecosystems results in unreasonable demands regarding the properties that must be restored to cultural ecosystems, and argues that where they *do* meet the more demanding conception of authenticity, they seem to have greater value as items of cultural heritage. Lastly, he bases a novel ethical justification upon an often overlooked type of value for the restoration of cultural ecosystems, which is grounded in the obligations we bear to our predecessors to understand and appreciate their values.

In Chap. 7, Glenn Deliège tracks the paradoxical role that "nature" plays as an evaluative criterion in New World restoration practices. On first sight "nature", understood as "that what has not been manipulated by human hand", can no longer play any meaningful role in Old World conservation, as the landscapes of the Old World are all "humanly mediated". Yet, Deliège demonstrates that "nature" does still play a role as an evaluative criterion. Through a critique of Eric Katz's work on restoration, Deliège argues that when "nature" is evoked as a criterion, it does not refer to "nature" as an ontological category (of things "not manipulated by human hand") but to a rejection of the (complete) instrumentalization of what one is aiming to restore. As such, the restorative act is not primarily an act of manipulation,

but of interpretation: how to do justice to that what one aims to restore. Yet because the meaning of nature is always embodied in concrete material forms, it is subject to transformations over which we have no ultimate control. Both nature restoration and preservation therefore have to endure the tension between keeping the meaning nature has present through manipulation, and recognizing that such manipulation can destroy what it sought to conserve or presence in the first place.

In Chap. 8, Alan Holland discusses the reclamation of the 'lost' gardens of Heligan in Cornwall (UK), hailed by the London *Times* as "the garden restoration of the century". Holland shows that this description poses something of a conservation conundrum. For exactly those processes that constituted the 'loss' – the encroaching bramble, the self-set trees and so forth – can be seen from another perspective to constitute the 'self-restoration' of nature. The appearance of conflict is defused by reflecting that both the original garden, and its restoration, have been conducted in a certain way – a way that can be said to involve the 'seeking of nature's permission'. This reflection is generalized to make the case that gardening in a way that involves active and attentive engagement – call this 'Old World engagement' – is as respectful of nature as 'letting nature be' – call this 'New World disengagement'. Holland argues that although many gardening practices involve human manipulation they can still be conducted in a way that is wholly natural, as distinct from unnatural.

In the final chapter of Part II, Chap. 9, Simon P. James argues that nature can be harmed, degraded, destroyed, but also restored, preserved or in some other way looked after, but that this also holds true of nature's meanings. It is in many cases possible to look after or 'cultivate' the political, religious, personal, mythic and historical meanings of natural things, events, processes and places. James argues that it is not simply the case that nature's meanings *can* be cultivated: there is sometimes a *need* for such cultivation. In support of this claim, he considers the modern tendency to talk, write and presumably think about our relations with nature in a 'managerial' way – in terms, that is, of the all-too-familiar idiom of objectives, targets, key performance indicators, and the like. This sort of approach is, he suggests, poorly equipped to do justice to nature's semantic richness. Hence, in light of the increasing tendency to conceive environmental issues in a myopically managerial way, there is, James contends, a special need to look after or cultivate nature's meanings.

1.4.3 Wolves and Wildness

After centuries of absence, wolfs are reemerging in the more urbanized regions in Western Europe. What can be learned from earlier experiences in North America? In 1992 wolves were introduced in Yellowstone. The case of wolves in Yellowstone confronts us with serious societal and moral questions. The papers in this part all discuss the re-emergence of wolves in the landscape, both in the Old World of Western Europe and New World of North America, and reflect about the contrasts and similarities.

In Chap. 10, Martin Drenthen discusses debates about the possible return of the wolf to parts of Europe where they were absent for over 150 years. He argues that the return of wolves challenges perceived notions, not only about what nature is, but also about human's place within nature. Drenthen discusses various perspectives towards the newly arriving wolves, that all imply not just an image of what a wolf actually is, but also a view about the landscape and human's proper place in it. He finds that *all* parties appear to have difficulty emplacing the wolf. Wolves challenge the idea of many wolf opponents that wolves are essentially inhabitants of the wild that intrude human land. Returning wolves do not care about a neat division between cultural landscapes and wild land, and in doing so undermine the very foundation of a worldview in which the domestication of nature is seen as essential for being human . The world view of many wolf lovers is equally challenged by wolves, however. Many regard wolves as victims of modern society and the human desire to subdue nature, but deem possible a relationship of peaceful coexistence with wolves as long as humans can control their aggression towards the natural world. The resurgence of the wolves, however, forces us to reconsider what it means to be part of an ecological network in which predators exist as well, and reveals that a particular kind of love for wolves can only exist *in abstractum*. Finally, the return of the wolf also challenges the dominant approach of nature managers and professional wolf experts who, in an effort to ease societal tensions surrounding the resurgence of the wolf, take the wolf as an essentially *normal* animal that can be managed rationally. But in doing so, wolf managers display an obsession with order in nature that contrasts with the very meaning that the wolf as a wild animal seems to have.

In Chap. 11, Thomas Thorp examines the reintroduction of wolves into the Yellowstone ecosystem in the 1990s, after having been exterminated decades before. The reintroduction sparked a violent political and cultural backlash that is still a defining feature of the political landscape of the American West. Thorp shows that in their attempts to study the wolf, the sciences inevitably encounter another wolf, the one that lives in myth and popular belief. Thorp argues that the terms in which this phenomenon are expressed need to be challenged. Instead of a distinction between the actual wolf studied by the sciences and the mythical wolf of public opinion, this phenomenon of the "double Wolf" calls for a deeper philosophical account of the ways that human beings make sense of their world. In his chapter, Thorp turns from the sciences and from the politics of the New World to a close reading of a narrative account of a wolf-attack in the Old World. He traces hyperbolic wolf-loathing back to two truths: just as humans must simultaneously re-present and repress the truth of their own demise, so too do the extractive industries of the American West rest upon a similar political and economic gesture of self-delusion.

In Chap. 12, Brian Seitz argues that many of the traditional boundaries with which we understand the world and our relation to the nonhuman have collapsed in modernity. Seitz argues that this development is literally embodied in the mutation of wildlife habitat; in the New World things have gone fundamentally haywire. In relation to this mutation Seitz considers the ambiguous and continually shifting dynamic between the rural and the urban. This dynamic might be linked to the

distinction between Old World and New World, provided this distinction refers to differing configurations of bioregionality, addressed in terms of history and evolving culture/nature.

In Chap. 13, Nathan Kowalsky reconnects the wolf as a symbol for the wild, with some of the themes that were developed earlier in this volume. Kowalsky criticizes the idea that cultural landscapes such as the rural landscapes of Europe are hybrids that step outside the binary thinking of humanity vs. nature, and thus offer grounds for a more cosmopolitan and cross-culturally relevant environmental ethic. To the contrary, he argues, the equation of cultural with agricultural landscapes reinforces the very dichotomy it proposes to dissolve. Kowalsky uses Prokofiev's "Peter and the Wolf" to show that putatively cultural landscapes are defined by domestication of animals and opposition to undomesticated landscapes as inappropriate for human involvement. The bucolic peace of rural Europe where "humanity" and "nature" appear to co-operate in mutually beneficial harmony is, in fact, a result of the successful domination of the wild other in both extirpating the wolf and relegating wildlands to largely aristocratic estates. Kowalsky argues that domesticated rural or urban landscapes do not exhaust the meaning of human culture, and that recognizing hunting as a landscape culture forces post-dichotomous thinking to be more critical: some landscape cultures may be less dominating and/or more natural than others.

This volume presents the first collection of essays in which Old World and New World approaches and perspectives within environmental philosophy are brought into conversation with each other. It shows that Old World and New World traditions still have an impact on conservation theory and practices today, but it also reveals that these different and sometimes diverging traditions are being challenged by the same kind of problems, such as the difficulty to select relevant baselines, and the problematic feasibility of habitat and species protection in an environment in a state of ever-greater flux as a result of powerful anthropogenic drivers. Given these common problems, a transatlantic exchange of ideas and insights among environmental philosophers can stimulate a learning process that may open up the path that leads to fruitful solutions.

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Part I
Wilderness and Cultural Landscapes

Chapter 2
Extracting Culture or Injecting Nature? Rewilding in Transatlantic Perspective

Marcus Hall

2.1 Introduction

Of the many challenges facing ecological restoration, the one most often receiving attention is the issue of selecting a goal or target state. In the project of repairing degraded natural systems, do we aim to bring back a pristine, wild state or else a more humanized, pastoral state? *Re-wilding* is the general label of the former goal, whereas *re-gardening* might be the best descriptor of the latter effort. To put this in a transatlantic context, North Americans may be much more comfortable rewilding, whereas Europeans are adept at gardening and regardening. Wilderness is traditionally an American thing, and many say that "real" wilderness simply doesn't exist in Europe, even in northern Scandinavia—and hasn't for a long time. The puzzle, however, is that today Europeans are increasingly joining Americans in rewilding. Perhaps restorationists on both sides of the Atlantic are simply *naturing*, *re-naturing* or *new naturing*, by bringing back better forms of nature, with little regard to how wild it may be. Has restoration's transatlantic divide simply dissolved?

If *wildness*, not wilderness, is our main concern, then surely each side of the ocean has abundant quantities of it along with plenty of reasons to restore more of it. Yet there still seems to be a transatlantic divide in restoration, as Europeans are simply more willing than North Americans (and other New Worlders) to see humans as integral to ecosystems. *Dedomestication*, for example, is a rising term in Europe's restoration lexicon, though a term generally reserved for animals and sometimes plants but not landscapes. Perhaps the oceanic divide therefore arises from differing challenges of extracting domesticity instead of injecting wildness. We can begin to make sense of this divide by reviewing historic debates between

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naturalists and ecologists who have thought hard about European and American natures. This chapter aims to unravel what is meant by rewilding, and show why there may be distinct transatlantic flavors to this practice.[1]

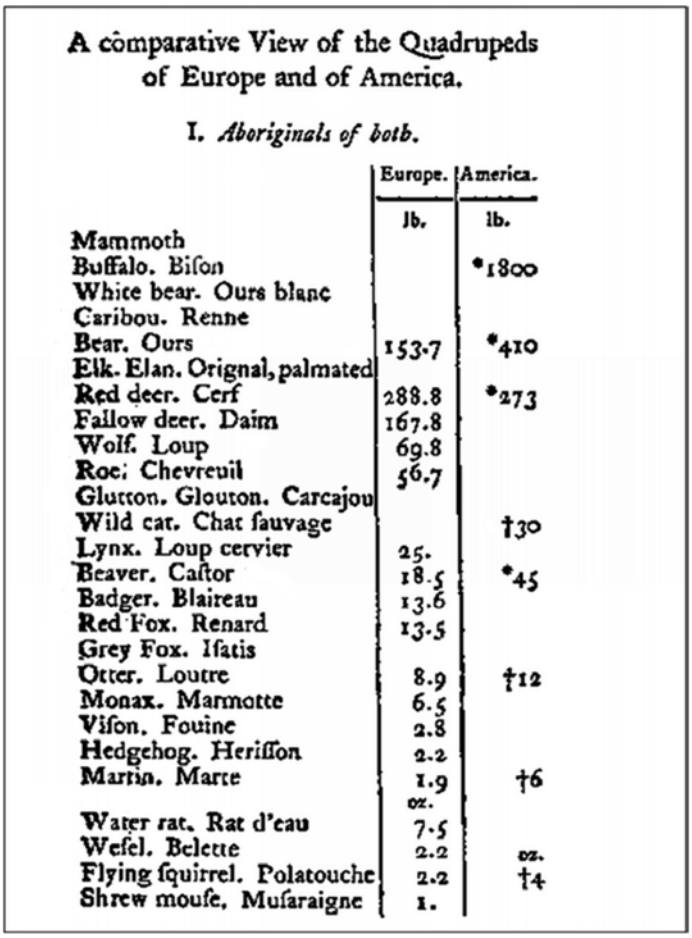
2.2 The Age of Natural History

In 1764, the great naturalist, Georges-Louis Leclerc, Comte de Buffon, declared that in the New World, "living nature is much less active and energetic, one could say much less strong" than in Europe. Buffon based his judgments on the comparison of quadrupeds across the Atlantic, concluding that America was comparatively less endowed than his old continent when it came to weight, height, girth, and cunning. Buffon was director of Paris' Natural History Museum, and he held hard evidence of Yank inferiority measured in bones and skulls. He felt the continental difference had something to do with the climate. The "heats" of America are less, he explained, and the "waters" are more spread over its surface. These physical hardships produced physiological inferiorities. *Degeneracy* was the fate of European creatures transported to North American lands. One need only look at the evidence (Comte de Buffon 1749, 86).

Rising to meet these un-American declarations was one Thomas Jefferson, then living in Paris and rumored to have passed a friendly evening with the naturalist. As Jefferson would explain it, Buffon felt that: (1) the animals common both to the old and new world are smaller in the latter; (2) that those peculiar to the new, are on a smaller scale; (3) that those which have been domesticated in both, have degenerated in America; and (4) that on the whole it exhibits fewer total species. Jefferson wrote his *Notes on the State of Virginia* in part to refute Buffon's claims, and to restore America's natural glory to its proper place. Indeed, Jefferson's response reflected America's rising pride in its natural history, a theme taken up and advanced by Thoreau, Marsh, Muir, and their like. Without a flamboyant nature, how could America compete with Europe's culture? From Jefferson's perspective, Buffon might make fun of America's pathetic libraries, its paltry museums, its petty universities, but not its purportedly puny quadrupeds! (Jefferson 1787, 72).

Jefferson made his own measurements, offering a step-by-step refutation of Buffon's claims in a detailed table (Fig. 2.1). Of course many creatures did not have a close counterpart on the other side of the Atlantic, but some of them did. According to Jefferson's calculations, his own home's bear, beaver, otter, and martin clearly outweighed their European cousins. Mammoths, moose, and elk clinched the rebuttal, felt Jefferson, and so he arranged to have bones or antlers of these creatures sent to Paris.

[1] As one piece of evidence for the rising popularity of "rewilding" and "dedomestication" in the English lexicon, one can plug these terms into Google's Ngram website: http://books.google.com/ngrams/. Doing so will graph a significant rise of both terms after the mid-1990s. The Ngram is said to search 5.2 million books published between 1500 and 2008 (see Michel 2011).



A comparative View of the Quadrupeds of Europe and of America.

I. *Aboriginals of both.*

	Europe.	America.
	lb.	lb.
Mammoth		
Buffalo. Biſon		*1800
White bear. Ours blanc		
Caribou. Renne		
Bear. Ours	153.7	*410
Elk. Elan. Orignal, palmated		
Red deer. Cerf	288.8	*273
Fallow deer. Daim	167.8	
Wolf. Loup	69.8	
Roe. Chevreuil	56.7	
Glutton. Glouton. Carcajou		
Wild cat. Chat ſauvage		†30
Lynx. Loup cervier	25.	
Beaver. Caſtor	18.5	*45
Badger. Blaireau	13.6	
Red Fox. Renard	13.5	
Grey Fox. Iſatis		
Otter. Loutre	8.9	†12
Monax. Marmotte	6.5	
Viſon. Fouine	2.8	
Hedgehog. Heriſſon	2.2	
Martin. Marte	1.9	†6
	oz.	
Water rat. Rat d'eau	7.5	
Weſel. Belette	2.2	oz.
Flying ſquirrel. Polatouche	2.2	†4
Shrew mouſe. Muſaraigne	1.	

Fig. 2.1 A comparative View of the Quadrupeds of Europe and of America [From: Thomas Jefferson, *Notes on the State of Virginia* (London: J. Stockdale, 1787, 77)]

Faced with surmounting evidence, Buffon would eventually downplay his New World degeneracy theory, even though it would be taken up with still greater enthusiasm by others, including one Abbé Raynal, who was himself confronted one day by a different American patriot, Benjamin Franklin. Here is Jefferson's report on a dinner party that included Raynal and Franklin:

> During the dinner [Raynal] got on his favorite theory of the degeneracy of animals, and even of man, in America, and urged it with his usual eloquence. [Franklin] at length noticing the accidental stature and position of his guests, at table, "Come," sayd he, "M. l'Abbé, let us try this question by the fact before us. We are here one half Americans, and one half French, and it happens that the Americans have placed themselves on one side of the table, and our French friends are on the other. Let both parties rise, and we will see on which side

> nature had degenerated." It happened that his American guests were Carmichael, Harmer, Humphreys, and others of the finest stature and form; while those of the other side were remarkably diminutive, and the Abbé himself particularly, was a mere shrimp. He parried the appeal, however, by a complimentary admission of exceptions, among which [Franklin] himself was a conspicuous one (Jefferson 2009, 458).

In this classic transatlantic rivalry, facts would help explode myths, but the facts were themselves in significant dispute. If conservationists in Buffon's day—wildlife enthusiasts—had to choose sides based on expert opinion, they surely would have favored saving European over American flora and fauna.

2.3 The Age of Ecology

A different transatlantic rivalry dealt with the human place in the landscape. This other debate flaring in the early twentieth century involved the day's leading ecologists in the question of vegetational climax. Frederic Clements, surrounded by Nebraskan prairies, wondered why his local plant communities stopped developing at grasses, and did not continue onward into shrubs or trees the way they did in other temperate lands. Clements would eventually decide that climate and soil were the main factors behind Nebraska's grasslands; in fact he suggested that every distinct climate and soil nurtured a distinct climax vegetation. This all made very good sense, except that on the other side of the ocean, Arthur Tansley also noticed widespread grasslands—yet these were growing not in vast inland prairies but in the highlands and lowlands of the British Isles, and were often scattered with carpets of purple heather, though they could also nurture trees if they were just planted. Tansley felt strongly that an additional factor should be used for explaining climax vegetation beyond climate and soil: that factor was humanity. Planting, mowing, raking, grazing were all human activities recurring over centuries to forge the English landscape. Tansley told Clements that by omitting *Homo sapiens* in his theories, he was missing one of the biggest factors of all.

The two argued over the existence of *sub*-climaxes, *dys*-climaxes, *anti*-climaxes. Because Clements considered the whole plant community as growing organismically into its proper natural climax, he did not easily see how it could "grow" backward into an anti-climax, even if humans were a potent force. For the American, humans and their land uses had no place in ecological models (Weaver and Clements 1938, 86; 88). But Tansley disagreed. In his classic 1935 article, "The Use and Abuse of Vegetational Concepts and Terms", Tansley argued that natural climaxes are

> legitimate as a description of the ecosystems of the world before the advent of man, or rather with the activities of man deliberately ignored…. But it would be difficult, not to say impossible, to draw a natural line between the activities of the human tribes which presumably fitted into and formed parts of "biotic communities" and the destructive human activities of the modern world. Is man part of "nature" or not?… Regarded as an exceptionally powerful biotic factor which increasingly upsets the equilibrium of preexisting ecosystems and eventually destroys them, at the same time forming new ones of very different nature, human activity finds its proper place in ecology (Tansley 1935, 303).

My own hunch is that Clements was examining North America's relatively untouched (or lightly touched) ecosystems—or at least he assumed them to be as such. Clements carried out his work on what he saw to be pristine places, so that his ecological theories deliberately excluded human action. This was not the case with Tansley, who could not help but see centuries of human use in the English countryside. Any ecological experiment or model that Tansley devised necessarily included humanity in its cast of characters.

There was also the *judgment* of human effects. Clements readily observed farmers breaking the plains with their plows to give the overwhelmingly negative result of the Dust Bowl. Tansley, though, talked of "anthropogenic" climaxes, whereby agricultural processes could produce normal, even beneficial landscapes. Clements considered human activities to be outside of natural process so as to disrupt them; Tansley countered that human activities could be integral, even helpful, to nature's processes. It seems that much of this transatlantic difference can be explained by the environments—mental and natural—that each ecologist worked in. Pristine systems were crucial to the American who was surrounded by seemingly pristine systems; this was not the case for the European (Hall 2005, 168–171).

This second rivalry therefore looked beyond facts to consider the role of humans in ecosystems. Both scientists went to the field, and both made accurate measurements. There was no dispute over whose creatures or whose ecosystems were bigger and better. Rather, there was a fundamental opinion difference over how *Homo sapiens* affected the environment. Certainly human activities in both locations were not going away anytime soon, and so Tansley's position represented the path of least resistance. Those such as new-age environmentalist Stewart Brand would take up Tansleys cause when he published the *Whole Earth Catalogue* (1968–1998), writing in its first sentence that "We are as gods and might as well get good at it." I'm not sure ecologists can be objective even when they have the facts in hand.[2]

For our purposes, the Clements-Tansley debate shows that the world might be divided into wilders and gardeners. Wilders set out to erase or extract human processes—or if absolutely necessary, to place humans in the back room where they adjust dials and spin wheels so that more immediate wild processes can flourish. Wilders aim, like Aldo Leopold, to think like a mountain so that the mountain can continue along its normal, wild path … or some might say, they use "close-to-nature" methods. If deer herds have to be culled because they threaten to overgraze a mountain's slopes, so be it. If deer predators need to be reintroduced to cull those herds, reintroduce them. The wilder's goal is to keep human activities from view, keep humans behind the curtain so that the real show can go on.

Gardeners are much more willing to open the curtain. "We are as gods", say the gardeners. They value this or that biodiversity, this or that landscape aesthetic, and they set out to maintain or even re-create it. Before reconstructing the Ravensbourne River near London, local residents were surveyed to see what sort of river they would most prefer. By majority opinion, survey results instructed river managers

[2] Brand is, incidentally, of U.S. origins, suggesting that not all Americans are environmental misanthropes.

how many meanders to insert, how many sand bars to construct, how steep to grade the banks. Nature by design, yes, but a self-perpetuating nature that obeys normal processes. For gardeners, kids splashing at the river bank by summer is a normal biological agency (Tapsell 1995).

2.4 Preserving and Creating the Wild

Before exploring a third transatlantic debate with an eye toward understanding the nature of rewilding, it is worth visiting the Juraparc, which is a modest game park tucked away in the foothills of the Jura mountains that run along the Swiss/French border. If you are unable to pay the admission and bodily visit what amounts to a small private zoo in the backyard of a rolling farmstead, the next best option is to click on its webpage.[3] Visiting this webpage will bring up images—along with husky sounds and calls—of the various hairy, horned, clawed, and toothed animals being raised at this estate. Listening to this webpage's aural appeal to stop by and visit sometime may raise primeval tingles on the back of the neck, but it also raises questions about what all these bears & wolves & bison are doing in this obscure corner of civilized Europe. The Jura Mountains, after all, might be a more appropriate setting for *pterodactyls* and *trianosaurs* of the Jurassic Park variety, as recreated by Stephen Spielberg. According to the webpage (which also showcases an attractive restaurant serving buffalo steaks), the bears were imported from Croatia, the wolves arrived from eastern Europe, and the bison hail from North America. It seems that Compte de Buffon would be mortified! Perhaps Arthur Tansley would be proud.

It turns out that elements of such wildness riddle western Europe. Although some of this wildness mimics Africa's savannahs—as at *Planete Sauvage*, France's mini safari park near Nantes—most of it reproduces Americana, especially western Americana. Consider the more famous example of Euro Disneyland situated just outside Paris. In his 2003 book, *Nature by Design*, Eric Higgs uses the Wilderness Lodge of Florida's DisneyWorld to show just how far wild nature, or renditions of it, might be created by Disney designers, called imagineers. Now this story is magnified, it seems, and then turned inside out when that wildness is imagineered into the countryside of Marne-la-Vallée, France. Apparently Euro Disneyland was, until the mid-1990s, an economic failure because it imported too much American-*ness* at the wrong time, and not many Europeans could stomach this amusement park, at least initially. Someone pointed out that Euro Disneyland's imagineers had to struggle especially hard with their vision of the Sleeping Beauty Castle, for example, in a place where real medieval castles lay just down the road. Nonetheless, this and other key icons of the American imagination were built successfully, including Wilderness Island, which was craftily hidden within Frontierland (Figs. 2.2 and 2.3). A few years later, when Euro Disneyland was rechristened as *Parc Disneyland*, we see that

[3] Fabien Honsberger, "Juraparc Homepage," Juraparc SA, http://www.juraparc.ch/. Accessed 7 September 2011.

Fig. 2.2 Sleeping Beauty Castle, Disneyland Paris (From http://www.publicdomainpictures.net/)

Fig. 2.3 Frozen river on Wilderness Island, Disneyland Paris (From http://www.magicforum.eu/)

"Euro" had been safely extracted from the title, implying that "Europe" and "Disneyland" could not easily be merged. No matter. In the case of the island and elsewhere on the grounds, lots of California trees were brought in, including dozens of giant sequoias. Never mind that these are alien species in Europe, some of them borderline invasive. Perhaps *Parc Disneyland*, now the most visited and "most magical park in Europe", has been carrying out a rewilding project all along that Europe's avant-garde environmentalists should be celebrating.[4]

But is all of this EuroWilderness a surprise? After all Europeans invented the stuff, and have always been the ones most fascinated by it. By definition, it's everything they were not.

According to an insightful study, medievalist Joep Leerssen points out that Europeans have long harbored wilderness, or at least wild elements, often projecting them to the peripheries of their continent: to the eastward fringes, to the dark forests, to the mountain tops, and especially to its western shores, away from civilized cores. Europeans in the fifteenth and sixteenth centuries were convinced that wild people also thrived in these peripheries, and the Irish in particular (as least as viewed by the English), personified these wild people. It was well known that Irish men and women—uncouth and poorly nourished—often carried small tails under their cloaks and britches, demonstrating their half-animal, half-human selves, with wildness manifested in body as well as in place (Fig. 2.4). Once Columbus sailed west and came upon the New World, says Leerssen, then Europe's wildness was telescoped to the Americas. Indigenous Americans and their continent became the main realm of wild people and places. By the sixteenth century, all of Europe had retracted to a civilized core, and the Americas became its wild periphery. Wilderness across the ocean depended on civilization at home. Wilderness didn't get invented by the Americans, and they hardly loved it, and never tamed it. It was always Europeans who were its most avid supporters. Witness the number of Germans who today flock to Monument Valley, the Redwoods, or Alaska. The demand is so large that in summer Lufthansa's subsidiary, Condor Air, offers twice-weekly nonstop flights from Frankfurt to Anchorage (Leerssen 1995).

Europe's *other* therefore found its flourishing in America—and a few other extra-Europes. Americans in the meantime were becoming very sensitive to Europe's rising infatuation with wilderness, and it didn't take them too long to become fiercely proud of this European heritage bestowed upon them. Wilderness became patriotic; it became cool; and ever since, devoted Europeans have been reimporting this wilderness from North America. Witness the giant sequoia trees

[4] Safari park "Planete Sauvage Homepage," http://www.planetesauvage.com/ (accessed November 6, 2011). About Eurodisney and its early failure, see Patrick Zimmer, "Why Eurodisney failed," http://patrickzimmer.com/why_eurodisney_failed.htm (accessed November 6, 2011); Chris and Mahendra Madhavan "Euro Disney or Euro Disaster," Winslett's, March 17 2009, http://www.winsletts.com/2009/03/euro-disney-or-euro-disaster.html (accessed November 6, 2011). Concerning the composition of the trees on the grounds of Parc Disneyland, see: "Disney's sequoia Lodge—Disneyland Paris," Senses holidays, http://www.sensesholidays.co.uk/holiday/disneys-sequoia-lodge-disneyland-paris/104/ (accessed January 13, 2012).

Fig. 2.4 John Speed, *The Kingdom of Ireland*, map and illustrations engraved by Jodocus Hondius (1563–1612) (From the 'Theatre of the Empire of Great Britain', pub. By John Sudbury and George Humble, 1610)

fashionably imported to Europe as early as the 1870–1880s, and planted alongside mansions and churches, as in Switzerland or wherever the European climate approximated that of northern California (Fig. 2.5). Witness the fame of the Buffalo Bill show, wildly popular when it toured in quintessentially civilized places such as Munich and Bologna. Witness today's bison and wolves imported to theme parks across Europe, and the prices that can be charged to appease eager young wilderness explorers and their parents. Witness growing British efforts at rewilding.[5]

One can also recount how Roderick Nash (1978), the American wilderness historian, was disappointed with European nature. A transcript of one of his speeches tells of how one of his U.S. friends, several months after being transferred

[5] For locations of record Giant Sequoia in Europe, see for example, "Die dicksten, höchsten und ältesten Riesenmammutbäume (*Sequoiadendron giganteum*)," MonumentalTrees.com, http://www.monumentaltrees.com/de/baeume/riesenmammutbaum/rekorde/ (accessed May 20, 2011); and Rydell and Kroes (2005).

Fig. 2.5 Giant Sequoia planted alongside a church in Erlenbach, Switzerland (Photo by author)

to Geneva, set out to take a wilderness holiday in the Alps. But following a concerted search by map and car, this transplanted American couldn't find any place wild enough to merit a backpack trip. Frustrated, the friend gave up the search and went back to the city, returning his tent and pack to the closet. With a different wilderness in mind, it's little wonder that Nash's friend and his like-minded European land managers would applaud efforts to rectify Europe's wild shortcomings.

And so I wonder again, what sorts of advice should these land managers be listening to? Should Europeans push harder for rewilding their woods, wetlands, and mountains—or should they be dedomesticating them? Should they be injecting wildness into places and their creatures, or should they be extracting the human touch from land and life, erasing the anthropogenic wherever possible? My best and most simplified answer is that if Americans work to *restore ahistoric* systems (as by rewilding), Europeans can aim to *re-create historic* systems (also by rewilding). Such questions suggest right and wrong answers.

2.5 The Age of Rewilding

It is worth exploring the rewilding issue through a third transatlantic dichotomy, which depends not on factual disputes about the natural world or on judgment of humanity's imprint as beneficial or detrimental. My third pairing pits Josh Donlan against Frans Vera by focusing on their restoration proposals of introducing species that are analogous to those now extinct.

Donlan is an American conservation biologist spearheading a movement to bring to North America's open spaces a host of big game species similar (or analogous) to ones that once thrived during the Pleistocene period of 13,000 years ago when *Homo sapiens* were still migrating across the Bering Land Bridge to establish themselves on a new continent. Donlan's reasoning goes that during this prehistoric time, these first Americans hunted much of North America's Pleistocene mega-fauna into oblivion, even though, for example, the pronghorn antelope had already developed its spectacular 10-m leaps in order to outrun the American cheetah and other mega-predators newly extinct. Thus, if wildlife managers could now only borrow a few modern-day cheetahs, some lions, and a handful of other analogues (or surrogates) of extinct Pleistocene species, then propagate them in large reserves, say in New Mexico, these creatures would serve to reproduce many of the key prehistoric ecological forces for keeping evolution moving forward in American ecosystems. No matter that Africans feel repulsed by this latest act of American imperialism, in part because ecotourists would no longer need to travel to Africa to see the world's largest cats in action. No matter that these African cats would be non-native (even invasive?) species in American habitat, so that they might kindle all sorts of unknown and undesirable side effects to these ecosystems; though, such side effects might be avoided or mitigated with proper study and preparation. No matter that Donlan has received death threats for his rewilding proposal from a few gun-toting Americans who are scared silly that implementing his ideas could mean that lions would be wandering through their back yards (Donlan et al. 2005; Donlan and Green 2010).

Meanwhile across the Atlantic, Dutch ecologist Frans Vera likewise recommends propagating analogue species in open areas in his own country, and indeed this is already happening in the form of Heck cattle and Konik ponies, hearty breeds imported from Germany and Poland and released in select Dutch natural areas (Fig. 2.6). Intensive grazing and trampling of these animals is expected to reproduce herbivorous activities of prehistoric ungulates that once roamed Europe. Such grazing pressures seem to be creating wetlands and woodlands with open glens and briar-lined meadows that simulate vegetation patchworks like those Vera believes once permeated central European ecosystems (Vera 2009).

There seems to be a stunning similarity in the American and Dutch plans, except that one proposal is usually dismissed as junk science while the other finds support even from the Dutch railway service who agreed to relocate their tracks

Fig. 2.6 (**a**) Heck Cattle and (**b**) Konik Ponies (Photos by Cristophe Cagé, Creative Commons Attribution-ShareAlike 2.5 Generic and Gwendolen/photo on flickr)

around a key implementation area, the Oostvaardersplassen. Perhaps the main difference in the popularity of these two rewilding proposals centers on timeline. Donlan and colleagues see an ideal natural system to be ones that pre-date human settlement, in his case those that existed approximately 13,000 years ago. Or, in the case of the Oostvaardersplassen, Vera's target ecosystem seems to be one that existed three or four thousand years ago when human impacts to European natural systems were relatively low. One may wonder why still earlier ecosystem snapshots were not chosen for either of these projects. Each rewilder's idealized snapshot occurs strategically on the eve of intensive human inhabitation, as though an earlier or later snapshot would be substandard. One may also question how analogous are these various species analogues: indeed, Heck cattle may occupy rather distant niches than those occupied by the ancient auroch that the cattle are meant to mimic. African lions potentially propagated in New Mexico may ultimately exhibit rather different predatory behaviors than those exhibited by their extinct American counterparts.

This third transatlantic contrast therefore stems from the acceptability of particular slices of history, or else from the feasibility of introducing analogue species. The American suggestion that only deep pre-human pasts represent true wilderness contrasts with the European assumption that conditions of a few thousand years ago are sufficiently wild. Donlan, moreover, insists that only big, fierce predators can reproduce wholly wild conditions and processes, while Vera compromises that large herbivores alone can go a long ways in rekindling such processes—while avoiding risks to passersby of rebuilding natural systems that are somewhat too red in tooth and claw. Of the two rewilding proposals, American wilderness with its absence of human imprint, is still being envisaged more purely if not more unrealistically than its European counterpart. Stated differently, Americans seem less likely to accept a tarnished variety of their revered wilderness, while Europeans are more willing to promote approximations of it that position humans as *Homo faber*, the user of tools for remaking and refashioning their surroundings.

2.6 Transatlantic Divides?

What can these transatlantic perspectives tell us about how much of the wild can be included in our restoration goals? The messages are several, but I can think of the following: the Jefferson-Buffon squabble implores us to think again about environmental semantics: what makes a forest a forest, or what is a true wilderness? We must consider harder just how indicative are our environmental indicators: does the data indicate what we say it does? These are questions of facts and their interpretations. There will always be values involved in doing conservation that even scientists cannot get around.

The Clements-Tansley rivalry illustrates that we should be aware of how far people see themselves as part of the natural world. Choosing to side with humans in the landscape may be easier but, in many cases, more detrimental to biodiversity. As gardeners, we may want to create Pleistocene parks, Holocene parks, or even Jurassic parks, if we can just capture appropriate pieces of DNA in amber. We might classify all of these parks as "wild"—and set out to rewild them when necessary, if we can identify an optimal past, by voting or by measuring (which is often like voting). We can stay hidden behind the curtain in trying to make these systems work normally. Or else we can expose our designs, and may as well get good at designing them. It seems that both Clements and Tansley are being enlisted in restoring their respective continent's wild areas.

The Donlan-Vera divide shows that we should think hard about history. There is generally more sensitivity to the past in Europe than in America, and that has certainly worked to Vera's favor. Americans have been trying to run from history ever since they moved to their distant continent: Henry David Thoreau (1862) once proclaimed that, "He is blessed over all mortals who loses no moment … remembering the past." But America's history-shallowness shines as an opportunity for all to examine assumptions about idealized pasts and perfect natures. Landscapes change because climates change, because human impacts change, and because our ideas of managing landscapes change. The historical assumptions that we hold in our heads tell us what systems we want to restore—or preserve; and even the act of *preserving* continually evolving natural states requires us to continually restore them.[6]

Despite the difficulties of identifying restoration's target state, one can certainly recognize a rising enthusiasm on both sides of the Atlantic for making that target a *wild* state. In the last 10 years, Dave Foreman's call to rewild North America has been mirrored in Great Britain by efforts to rewild the Scottish highlands, for example. It appears that as wilderness disappears faster, there are louder calls to bring it back. But returning to our main inquiry, is their activity an effort to push nature in or pull culture out? Our main insight so far is that North Americans who see themselves surrounded by more pure wilderness aim to remove culture; whereas Europeans long surrounded by humanized systems

[6] On preservation as restoration, see Hall (2005, 238–239).

attempt to reintroduce nature. But we are beginning to realize that differences in rewilding east and west of the Atlantic are due to even more subtle reasons (Foreman 2004; see also Kirby 2009).

2.7 Rewilding Animals

Another way to shed light on this enigmatic practice of rewilding—the process of using the human touch to erase the human touch—is to consider how this activity is carried out in the animal world. For tigers or bears or elephants who have lived their lives in zoo cages, rewilding begins once these creatures are released from their cages and brought out to unfenced land. For propagators of endangered animals living in captivity, this process is often referred to as "dedomestication"—quite literally, *un*taming so that human-dependent animals may begin to survive and multiply on their own. But most dedomestication efforts are woefully slow and ineffective so that once fenced animals have tasted domestic life, returning them to an unbound world often spells their doom. Outside of their enclosures, they no longer run as fast as their uncaptured cousins; they no longer hunt as stealthily; they no longer compete effectively in attracting mates. Efforts to untame semi-domestic animals, like efforts to untame semi-domestic landscapes, show how durable are human changes to natural systems. Although some taming may be reversed, human contact has lasting effects on wild organisms (Gamborg et al. 2010).

A case in point is the project of saving China's rare tigers, whereby zoo animals are brought to the forest so that they learn to hunt and fend for themselves. Of China's 90 remaining tigers, 60 of them live in captivity. Importantly, animal propagators have found that second generation tigers are the best candidates for dedomestication, as parent cats accustomed to zoo life lose their ability to hunt, lose their fear of humans, and almost always starve if brought back to the wild. Only their kittens, quickly removed after birth from the human world of free handouts and muted competition, can learn their ancestral habits of capture, fight, and flight. The "Save China's Tigers" organization explains that there is a period of human tutoring, whereby the young tigers are taken out by a trainer, encouraged to chase fleeing game, and then associate game with a meal and a full stomach. Because of the lack of space in China, select animals do their training in South Africa's game preserves, first spending time in a smaller 40-hectare pen before moving to the 100-hectare Hunter's Palace. Once dedomesticating tigers have learned to survive well on their own, they will hopefully pass their skills on to their offspring, with hard-wired behaviors of instinct reinforcing learned behavior, and evolutionary pressures selecting more fit genes in subsequent generations. Dedomestication is deemed sufficient when the big cats are reacting to wild stimuli and contributing their own predatory roles.[7]

[7] "Save China's Tigers Homepage," Save China's Tigers UK Charity, http://english.savechinas-tigers.org/ (accessed January 10, 2012); Tilson and Nyhus (2010).

But such conservation successes are often disrupted by setbacks, as in September of 2011 when Tiger 327, a precious young dedomesticating male broke through a gate to challenge a nearby advanced classmate who proceeded to teach him a fatal lesson. Although landscape restorers do not experience the heartbreaking failures of tiger restorers, both can appreciate the dilemma of restoring fully untamed conditions. There is greater room for error when rewilding landscapes than when dedomesticating animals, although the products of both activities will certainly exhibit a continuum between wildness and domesticity.[8]

Dogs may likewise be dedomesticating if they chew their leash, run to the edge of town, join packs, and become feral. But is it ever possible for dogs to run loose for several generations, and eventually morph into wolves? It seems that the process of becoming feral (in dogs, goats, horses) is dedomestication, but dogs can never become wolves through rewilding: evolution is a forward moving process. Despite Jack London's tale of the Wild's siren call, dogs cannot shed their domestic genes, and cannot return to their former evolutionary state of wolves from whence they came. Even the Heck cattle that now graze Holland's Oostvaardersplassen are not semi-tame ancestors of auroch, but a 1920s and 1930s breeding product of the Heck Brothers, two German zoo keepers who laboriously crossed various rare and hardy cattle lines, including some from as far away as Corsica—but none that comprised a surviving auroch, the massive ungulate with long horns that disappeared in the seventeenth century to be admired by later cattle enthusiasts. In the eyes of their creators, Heck cattle were meant to simulate ancient auroch, but DNA sequences would reveal that this new breed may manifest greater human engineering than the landscape it is supposed to rewild. Unlike dedomestication, rewilding is a forward moving process, so that endangered tiger propagation, dog feralization, and ancient breed recreation require large amounts of time to evolve into significantly new varieties. In efforts to bring back nature's designs, rewilding implies marching to the future; dedomesticating would mean marching back to that future (De Bruxelles 2009).[9]

Rewilding also implies greater reliance on spontaneous, nonhuman processes. Whereas the project of dedomestication usually involves human mediation, in order to train, teach, and untame, the project of rewilding can proceed even when people are absent. A degraded forest can begin to rewild itself, but it can hardly dedomesticate on its own. The latter process of removing human designs from an ecosystem is much more active and hands-on. Rewilding is semantically more flexible in suggesting a role for humans as well as nature in the project of earth repair.

[8] Ed Stoddard, "Tiger-on-tiger fatalities increasing," IOL Scitech, September 29, 2011, http://www.iol.co.za/scitech/science/environment/tiger-on-tiger-fatalies-increasing-1.1147113 (accessed January 10, 2012); Jozef Keulartz, "Ethics of Wildlife Conservation," Academia.edu, http://www.academia.edu/jozefkeulartz/Papers/319974/Ethics_of_wildlife_conservation (accessed January 10, 2012). Invited lecture at the Symposium Managing Populations of Free-ranging Herbivores, Utrecht, 26th October 2010.

[9] See also the similar breeding story of Konik ponies, "Rare horse breed proves crucial to delicate ecosystem," Horsetalk.co.nz, http://www.horsetalk.co.nz/horsesinhistory/konik.shtml (accessed February 10, 2012).

Rewilding encompasses the human hand that pulls out alien weeds along with nature's hand that rekindles a tiger's instinct to hunt prey. No wonder that most restorers favor *rewilding*, not *dedomesticting*, as the label of their pursuit. Rewilding, of species or of landscapes, is the preferred term on both sides of the Atlantic. Still, the dual role that rewilding enjoys—as an activity that is hands-off as well as hands-on, passive as well as active—may provide a clue to understanding its different Atlantic interpretations. We may speculate that one continent favors passive rewilding while the other favors active rewilding. But in fairness, it would be difficult to decide which continent prefers a stronger rewilding hand. Do Donlan's predators represent a more active rewilding role than Vera's herbivores?

Another crucial point is to remember that to his Dutch public, Frans Vera does not label his projects as rewilding or dedomesticating, but *natuurontwikkelings*—a Dutch term that is best translated at "Nature Development". Although the Dutch (of all continental Europeans) are probably the most willing to use English in their day-to-day communication, *nature development*—or perhaps *new naturing*—is the best English description of what they do in their fens. Vera is best seen not as rewilding, not even restoring, but as nature-developing. All the transatlantic posturing about wilderness, and about whether Old or New Worlds harbor more pure forms of it, largely drops through the cracks when we begin to consider translations of it in other languages. English *wilderness* can be the place where wild peoples dwell, or where other-than-human processes reign, but the Dutch notion of *ontwikkelings* positions spontaneous, unmanaged change as the main goal of restoration projects. It is unbridled nature-free-from-culture that is favored at the Oostvaardersplassen. Nature is being released from the bounds of human control to do what it will do, aided by analogue grazers and protected from well-meaning land managers.

Similarly in restoration projects in Sweden or Estonia or Greece, *wilderness* cannot ultimately be a target state for the simple reason that it does not and cannot exist in these places: an English speaker's wilderness concept is superseded in these countries by local linguistic approximations of, respectively, *vildmark* (literally: wild land), *metsik loodus* (lit: forest-like nature), and *άγριος φύση* (lit: wild nature). And even these terms reflect conceptual translations of how local native speakers would describe English wilderness in their own land, not what in their view is essentially important to a wild place—be it spontaneous, untrammeled, isolated, sublime, terrifying, spectacular—or various combinations of these descriptors, or, something else completely. When bringing back wilderness, or creating it anew, a restorer must set out with a good epistemological map of this entity, even though it will vary according to language. One must therefore conclude that outside the English speaking world, "rewilding" may be getting lost in translation.[10]

[10] *Wilderness* equivalent translations for Swedish, Estonian, and Greek were supplied to the author by Lars Elenius, Kadri Tüür, and Iosif Botetzagias as part of the Wilderness Babel: What does wilderness mean in your language? project convened by Marcus Hall for the "Environment & Society Portal" of the Rachel Carson Center: http://www.environmentandsociety.org/exhibitions

In the end, the only fair way to compare continental practices of "rewilding"—to keep our attention on this one term—is to limit our examples to English speaking lands: places predominantly inhabited by English speaking peoples and their descendants across the oceans. Limiting our rewilding comparison, then, to New Mexico's deserts and Britain's Highlands or Lake District helps skirt the linguistic complication. One might thus compare the plans of using America's analogue Pleistocene predators with those of using Britain's increasingly widespread "naturalistic grazers". The latter rewilding practice depends on everyday domestic livestock to check unfettered vegetative growth, by moderately browsing hedges and munching grasslands to open up habitat for other flora and fauna. To posit ordinary cows and sheep as allies in the rewilding process is foreign indeed to most American rewilders, but therein may lie the central transatlantic difference.

Today in the lush valleys of Ennerdale situated within England's famed Lake District are roaming herds of Galloway cattle. Managers of this natural area declare that the introduction of these slow-moving, black beasts is serving to make the surroundings more "self-willed": These "cattle can have a positive impact on bracken and low scrub, breaking up mats of dead litter and creating pathways through tall, dense vegetation. The cattle can also create more ground disturbance and benefit tree seedlings by 'burying' them into the ground." Domesticity is therefore promoting wildness at this place, so that here the rewilders are people's animals rather than people themselves. The "Wild Ennerdale" plan cites the preservation of a "sense of wildness" as a key aim. In particular, the plan goes at great length to distinguish wildness from wilderness: "Wilderness is a noun which acts like an adjective …. Wildness is everywhere in Britain, if only we will stop in our tracks and look." Here then is our best answer to the puzzle of transatlantic rewilding. America's Pleistocene rewilders still have mythic wilderness in mind, one that they learned from European settlers who brought it with them across the ocean; but Britain's rewilders keep the wild adjective in their mind. In the Lake District and in the Highlands, restorers seek to bring back the essence of the wild: wildness not wilderness. Restorers in both continents are rewilding, but the Europeans pursue the adjective while the Americans chase the noun (Hodder and Bullock 2009, 41).[11]

Dealing with such a plethora of terms can be annoying. In summarizing his thoughts about naturalistic grazing, Keith Kirby, a leading voice in British conservation circles, pleas that he "would prefer to see trials of 'wilder', albeit controlled, grazing schemes started, rather than spend time in debating whether we are rewilding, wilding, doing limited intervention or just undertaking extensive farming" (Kirby 2009, 62). Certainly both wildness and wilderness exist ultimately in our minds, for we must perceive both before we can begin to restore either (Fig. 2.7).

[11] See also "Cattle," Wild Ennerdale, http://www.wildennerdale.co.uk/cattlemanagement.html (accessed January 15, 2012); "Concept of "Wild"" in *Wild Ennerdale Stewardship Plan Text 2006*, Wild Ennerdale, March 13, 2006, http://www.wildennerdale.co.uk/stplan/Stewardship%20Plan%20Text.pdf (accessed January 15, 2012).

Fig. 2.7 "Tod's Vegetable Oil Van, North Carolina," Rewilding Exhibit (From Lucas Foglia Photography, 2012)

There is nonetheless a fundamental difference between restoring a quality and restoring a place. In our world of ongoing climatic and ecosystemic changes, rewilders will need to continue identifying wild references that are both adjectives and nouns. Rewilders still need to identify wildness as well as wilderness in order to clarify their goals. Wildness describes wilderness, and wilderness harbors wildness.

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Chapter 3
Restoration and Authenticity Revisited

Marion Hourdequin and David G. Havlick

3.1 Introduction

In 2006, in an editorial for the journal *Ecological Restoration*, Dave Egan lamented the lack of attention to historical fidelity and authenticity in contemporary discussions of ecological restoration. Rather than focusing on the ecological history of a site as the basis for restoration goals, many scholars of restoration were advocating projects driven solely by human ends. Without attention to the historical, pre-disturbance conditions of restoration sites, Egan worried that restoration would become too forward-looking, and too driven by "humans and human values." Unless we pay closer attention to "the historical fidelity or genuineness of our projects," wrote Egan, "…we are likely to fall prey to the mass consumerism that surrounds us—creating gardens where we maintain beings as 'things' strictly for our use and admiration" (Egan 2006, 223–224).[1]

Egan's short commentary expresses a worry closely related to one that has dominated philosophical discussions of restoration. Yet that worry, as elaborated by

[1] Others have stressed the importance of restoration that avoids narrow anthropocentrism. Two important works that emphasize the importance of ecocentric restoration as a practice that emphasizes the value of nature for its own sake and expresses deference to nature are Jordan (2003) and Jordan and Lubick (2011). Higgs (2003) expresses distinct but related concerns: he argues that we need to defend against technological restoration which is linked to the commodification of nature, and instead embrace focal restoration, a thoughtful approach which "[creates] a stronger relationship between people and natural process" and "expresses the commanding presence of nature" (Higgs 2003, 242).

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Robert Elliot (1982) and Eric Katz (1997), is even more serious than Egan's because it questions the possibility of authenticity in ecological restoration *at all*. In Katz's and Elliot's eyes, a focus on returning to the conditions described by ecological baselines can't save a restored ecosystem from inauthenticity. Instead, *all restored ecosystems fake nature*, even if the restored ecosystems perfectly replicate the biotic and abiotic conditions that existed prior to disturbance (Elliot 1982).

How can this be? In Elliot's view, a restored ecosystem is like an art forgery. It pretends to be something it is not. What it pretends to be is a system in which natural processes, rather than human manipulation, have generated – over decades, centuries, or millennia – the conditions we see before us. It pretends to be a place with a certain continuous history or genealogy, shaped by nature, not by humans. But like a forged painting – the work of a clever imitator that presents itself as that of a great master – a restored landscape is not really what it proclaims to be. Because it lacks the proper genealogy, it is of diminished value.

The idea here is that there is something about a landscape produced by nature that gives it value over and above the value of an identical landscape produced by human hands. This is an interesting and provocative claim, and there is something intuitive about it: we *do* seem to value certain elements of the natural world in part because they are beyond our control, or because they have been generated by processes independent of us. Certainly the rationale for American (U.S.) wilderness areas reflects this idea, with its aim to preserve places "untrammeled by man" and substantially free from human influence (U.S. Wilderness Act, Public Law 88–577). This impulse seems to be tied to the value we see in the existence of something larger than ourselves, free of human control, that can itself be a source of beauty and complexity. Experiencing places that remind us that there are other creatures in the world with their own interests and occupations, and that there are processes in the world that we did not create, but upon which we depend, can provide a valuable source of perspective and humility.

Elliot also seems right to suggest that value is often lost when we destroy something, even if we construct an "identical" thing or place to repair the loss. This seems to be the case with objects whose history matters to us – such as personal letters, handmade quilts, wedding rings, or a child's early artwork. A replica of a cherished letter is not the same as the letter itself: even if indiscernibly different from the original, it was not written by the same hand or delivered on the same day as its earlier counterpart. It seems plausible, as Elliot claims, that an object's genealogy may be relevant to its value, and that one of the things we (legitimately) value about natural landscapes is the very fact that they have been produced largely by natural forces rather than by human agency.

Our aim is not to dispute Elliot's claim that through the process of destruction and restoration, something inevitably is lost. However, our concern is that the kind of "faking nature" about which Elliot worries is irrelevant to many contemporary choices in restoration. Elliot makes his point in a particular context: he tries to show that the prospect of effective restoration ought not be used as an excuse to damage or degrade a place. We ought not think, for example, that clearcutting a forest is morally unproblematic as long as we can replicate the forest once the trees have been harvested. Elliot wants to show that the natural genealogy, and hence the

authenticity of a landscape *qua* natural landscape, cannot survive this change – even if the landscape could be replicated exactly.[2]

Yet in many cases of restoration, the landscape at issue is not a "natural" one in Elliot's pure sense.[3] In particular, "hybrid landscapes," where natural and cultural histories have been deeply intertwined over timescales from decades to millennia, don't neatly fit Elliot's model. At these places, there is no discrete anthropogenic disturbance of pristine nature that restoration aims to fix. Hybrid landscapes typically have layered socio-ecological histories, even where they are relatively "undeveloped," "uninhabited," and "natural." Understanding restoration at these sites thus requires a more nuanced discussion of authenticity and historical fidelity in ecological restoration, one that allows for different modes and degrees of authenticity and fidelity. For many hybrid landscapes, restoration will inevitably involve human ends and social decisions about what restoration should attempt to restore or preserve, and what it should eliminate or erase. There may be no straightforward way to identify the "natural condition" or "pre-settlement reference condition" for the site, nor any conclusive reason to embrace such conditions as setting the goals for restoration. This is not to say that there is no way to identify certain human influences as damaging or to pick out forms of degradation warranting repair; however, where past human uses of a site are politically, culturally, and socially significant, restoration that aims to recreate pristine or "pre-disturbance" nature may offer incomplete or inauthentic narratives that fail to disclose the full effects of past damage and the complexities of determining what aspects of their histories restored landscapes should help us remember, and what it makes sense to forget.

These concerns are particularly salient for the naturalization of former military and defense-related sites in the United States. Since 1988, the U.S. military has engaged in a program of military base consolidation, leading to the closure and decommissioning of more than 130 major military installations around the country.[4] Many of these lands, which are often highly contaminated but relatively undeveloped, have been re-designated as national wildlife refuges, with management responsibilities transferred from the U.S. Department of Defense to the U.S. Fish and Wildlife Service.

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[2] In this regard, it is important to emphasize that perfect replication of the original landscape, although imaginable, is, practically speaking, unachievable. The consequences of many environmentally destructive practices cannot easily be erased. One might also worry that the destruction itself causes harm that cannot be fully compensated by restoration: for example, the individual animals whose lives are shortened or ended by habitat destruction are harmed even if they are later replaced by others of their kind. This latter consideration provides one basis for accepting the thesis that value is lost in the process of destruction and restoration, even if one denies that the loss necessarily renders any subsequent ecosystem "unnatural" or "fake."

[3] More strongly, it is probably fair to say that there exists no landscape uninfluenced by humans in this day and age (McKibben 1989; Cronon 1995). This does not necessarily obviate the relevance of the category of the natural, however. Plumwood (2006) argues that we should recognize how human and nonhuman (natural) agencies work together to shape landscapes and ecosystems.

[4] Department of Defense Base Structure Report Fiscal Year 2003 Baseline (Washington, D.C.: U.S. Department of Defense, 2002); "U.S. Department of Defense Base Realignment and Closure 2005," accessed 15 September 2012, available at http://www.defense.gov/brac/index.html. A "major installation" contains at least 10 acres or $1.5 billion in assets.

In addition, the Fish and Wildlife Service now manages portions of two nuclear production sites formerly managed by the U.S. Department of Energy: Rocky Flats in Colorado and Hanford Nuclear Reservation in eastern Washington. At these sites, it seems strange and inappropriate to suggest that authenticity in ecological restoration (if possible) involves only the faithful recreation of the ecological conditions that prevailed prior to human disturbance, or more radically, that authenticity is impossible because all restoration necessarily deceives by "faking nature." Both approaches seem to involve a kind of essentialism about pre-settlement conditions, where a site can be truly restored only if all human impacts are eliminated or erased, or where nature is genuine only where entirely undisturbed.

It is hard to make out a philosophical justification for the view that ecosystems have essential natural identities that determine whether restoration is authentic or faithful to the site's history. On this view, which seems implicated by Egan's claim about the primacy of fidelity to a site's pre-disturbance ecology, a restoration is authentic only if it restores the features of a site that are essential to its natural identity. However, authenticity can be understood in another way, without reliance on controversial ontological claims. An *epistemic* understanding of authenticity focuses not on the identity conditions of a site, but on the way restoration narrates a place, disclosing or failing to disclose particular aspects of its history. Ontological authenticity focuses on the extent to which a place possesses and retains a genuine identity; whereas epistemic authenticity involves the ways in which a place makes available genuine knowledge and understanding of itself. For Elliot, these two modes of authenticity are intimately related, but it would be wrong to assume that epistemic authenticity always depends on a restored site's ontological authenticity. For many sites, and especially those hybrid landscapes (Whatmore 2002) whose social-ecological histories are ethically significant, the second, epistemic sense of authenticity is of greatest concern. And at these sites in particular, we can see more clearly why the ontological sense of authenticity is problematic.[5]

3.2 Hiding History: Two Cases

The process of ecological restoration seems inevitably to involve certain forms of erasure: indeed, erasing, undoing, fixing, and healing past damage are at the very heart of the goals and practice of restoration. What we seek in restoration, then, seems at first blush to be a landscape that resembles as closely as possible what came before – the conditions that existed prior to human disturbance. Yet complications arise. Elliot seems to see two problems with restoration, and the erasure that accompanies it. First, *in virtue of the fact that they erase past damage*, restored sites

[5] For an interesting discussion and critique of Elliot's ontological commitments in "Faking Nature," see Deliège (2010). Deliège argues that historical elements of restored landscapes are important as relics that provide material, symbolic connections to the past. A relic makes "its referent symbolically present to us" (Deliège 2010, 24) and is valuable for that reason.

fail to disclose the truth about their past. Second, and relatedly, because the nature of their past – particularly, the fact that the natural genealogy of these sites has been disrupted – diminishes the value of these sites, what is erased are the visible traces of this loss of value. Thus, the erasure of past damage is significant because it makes a site inauthentic in an epistemic sense: it prevents the visitor from *seeing* and *knowing* the way in which the site is *ontologically* inauthentic, how the site offers not real nature – which requires a continuous natural genealogy – but fake nature, "nature" recreated by humans.

To illustrate the relationship between epistemic and ontological authenticity, we can turn to Elliot's own fictional example of ocean dunes mined for rutile. Elliot suggests that even if the mining operation succeeds in perfectly replacing the dunes and the associated ecosystem – even if there is no net change in plant composition, or bird diversity, or any other feature of the ecological community – the restored dunes fake nature: they deceive observers into thinking that they are witnessing an undisturbed natural landscape, when in fact the new dunes are ontologically distinct from the original dunes: they are unnatural. The unnatural character of the landscape is hidden by the restoration, blocking knowledge of the site's ontological inauthenticity *qua* natural landscape. The underlying assumption seems to be that sites with unbroken natural histories retain their true identities; those disrupted by humans do not. Thus the ontological and the epistemological are linked, because it is the hidden ontological change, from natural to unnatural, that is responsible for the site's deceptiveness, for its failure to present itself as what it truly is.

Let us take another case, this time a real rather than a fictional one. For many years during the Cold War, the Rocky Flats Plant near Boulder, Colorado (approximately 15 miles northwest of Denver) produced plutonium triggers for U.S. nuclear weapons. In 1989, Rocky Flats was raided by the Federal Bureau of Investigation due to alleged environmental violations at the site.[6] After a temporary shutdown, nuclear and non-nuclear weapons production resumed briefly until 1994, when the remediation process began.[7] In 2001, Congress approved the Rocky Flats National Wildlife Refuge Act, designating the outer portion of the site as a national wildlife refuge. Substantial cleanup operations were completed in 2005, and the site was administratively divided into two units, the "central operable unit" and the "peripheral operable unit."[8] Two years later, in 2007, management responsibilities for the peripheral, less-contaminated portion of the site were transferred to the U.S. Fish and Wildlife Service. The central portion of the Rocky Flats site remains highly contaminated, and is subject to ongoing monitoring and assessment.[9] It will remain off-limits to the public, even as the periphery – the wildlife refuge – is opened for recreational use.

[6] U.S. Department of Energy (USDOE), Office of Legacy Management, "Rocky Flats Site, Colorado: Fact Sheet," accessed May, 2011, available at http://www.lm.doe.gov/rocky_flats/

[7] Ibid.

[8] Ibid.

[9] Ibid.

Unlike the fictive dunes described above, Rocky Flats has an extensive history of human use. Prior to its designation as a nuclear production site by the Atomic Energy Commission (later the U.S. Department of Energy), portions of Rocky Flats were ranchland, and a number of historic ranch buildings remain on the site today. In one sense, therefore, any restoration to native prairie will "fake nature" insofar as it presents the site as undisturbed or uninfluenced by human beings. Yet the prospect of "faking nature" at Rocky Flats is important not only because the restored site can never match in value its counterfactual undisturbed original condition, but because of the particular nature of the site's history that restoration has the potential to obscure.[10] Of specific concern, for example, is the prospect that the restored landscape will conceal or misrepresent the social, political, and military significance of this land and the associated conflicts and contestations. In the 1970s and early 1980s, Rocky Flats was the site of significant and persistent protests, including rallies that attracted tens of thousands of people. Acts of civil disobedience protesting nuclear production at the site at times led to hundreds of arrests for trespassing and blocking rail access through Rocky Flats.

The wildlife refuge land – in the peripheral operating unit – is primarily former grazing land acquired in the early 1970s as a "greenbelt" to provide a buffer around the Rocky Flats weapons production facility and to limit residential and other forms of development close to the plant.[11] The Fish and Wildlife Service now aims to "conserve the rare and unique tallgrass prairie found along Colorado's Front Range…[and] preserve a lasting wildlife and habitat legacy for future generations."[12]

What is interesting about Rocky Flats National Wildlife Refuge is that although the planned ecological restoration and wildlife management activities have not generated significant controversy,[13] the *portrayal* of the site – particularly in entrance signs – has.

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[10] Jordan (2003) argues that restoration actually has an important role in learning about and engaging with the history of a place, as restorationists explore a site's past in order to recreate ecological conditions that existed prior to disturbance. As he explains, "In many cases the process of restoration entails a kind of reenactment of the history of a place as the restorationist attempts to reverse ongoing change, or reproduce conditions that created the model landscape in the first place" (Jordan 2003, 130). However, our concern in this paper is not so much with the *restorationist's* knowledge of or engagement with a site's history, but with the way in which the restored landscape and its interpretation make visible the history of a place.

[11] U.S. Atomic Energy Commission, *Environmental Statement: Land Acquisition – Rocky Flats Plant, Colorado* (1972).

[12] U.S. Fish & Wildlife Service, "U.S. Fish and Wildlife Service establishes Rocky Flats National Wildlife Refuge" (July 12, 2007 news release), accessed May 9, 2011, http://www.fws.gov/mountain-prairie/pressrel/07-46.htm.

[13] The Record of Decision for the Comprehensive Conservation Plan (CCP) at the Rocky Flats National Wildlife Refuge notes that "contamination and cleanup," "public use," and "hunting" were the topics that attracted the greatest controversy in the establishment of the CCP. See U.S. Fish & Wildlife Service, *Record of Decision: Rocky Flats National Wildlife Refuge Final Comprehensive Conservation Plan* (2005), accessed May, 2011, www.fws.gov/rockyflats/Documents/Record-of-Decision.pdf. This is notable, since the CCP includes plans to restore the land through a variety of intensive measures, including use of prescribed fire, grazing, road removal, and herbicide application. See U.S. Fish & Wildlife Service, *Rocky Flats National Wildlife Refuge Comprehensive Conservation Plan* (2005), accessed May, 2011, http://www.fws.gov/mountain-prairie/planning/ccp/co/rfl/rfl.html, ch. 4.

The Fish and Wildlife Service received extensive comments on its "stepdown sign plan" which defines the text for signs to be located at visitor access points.[14] Critical responses to the signage plan focused on the way the description explained the site's history. Some, for example, critiqued the proposed signs' triumphalist rhetoric and the degree to which activities at the site were characterized as reflecting a purely defensive posture by the United States, through references to "holding the Soviet Union at bay," and the description of nuclear bombs as "deterrent weapons." Others expressed concerns about the remaining contamination and risks at the site, and the downplaying of those risks in the proposed text. For example, one respondent noted that visitors probably do not need to be notified about the possibility of "trips, slips, and falls" as the sign indicates, but rather about residual toxic and radioactive contamination and the risks it poses, if any.

One might object at this point that the sign controversy has little to do with the authenticity of *restoration* at the site. But if we consider restored sites broadly, then their authenticity is determined not just by the nature of restoration activities and restored lands themselves, but also by their explicit narration. We have argued previously that restored landscapes can have narrative power (Hourdequin and Havlick 2011), but many wildlife refuges also present the surrounding landscape through interpretive signs, exhibits, and visitor programs. Restoration and its interpretation together bear on the authenticity of a site. At sites that have been significantly disturbed or that have complex socio-ecological histories, there can be no hope of achieving authenticity in Elliot's ontological terms, and even if ontological authenticity for landscapes could be made coherent, it seems inapt for such sites. However, the concept of authenticity may remain relevant here in an epistemic sense, which focuses on the way that restored landscapes disclose, or fail to disclose, their past.

3.3 Restoration and Authenticity Revisited

We now turn to a further explanation and illustration of the ways in which epistemic authenticity, liberated from its ontological counterpart, may be relevant and fruitful in the ethics of ecological restoration. The shift from the ontological to the epistemic refocuses attention on the way in which we understand, interpret, and interact with restored sites. In this sense, the epistemic conception of authenticity is more *relational* than the ontological one, which suggests that authenticity is a property of the site itself.

To return to Elliot's art examples: an imitation Picasso will simply never *be* a Picasso. In virtue of its genealogy, the imitation is ontologically inauthentic *qua* Picasso painting. Insofar as the painting deceives viewers into thinking it is a Picasso, it is also epistemically inauthentic. Carrying this analogy into the realm of restoration,

[14] The Rocky Flats Stepdown Sign Plan, sign text, and public comments are available here: "Final Rocky Flats Signage," accessed June 16, 2014, http://www.fws.gov/nwrs/threecolumn.aspx?id=2147522646&terms=stepdown+sign+plan. The public comments discussed below can be found in the "letters with comment" links on this site.

a restored landscape can never *be* the natural landscape it imitates. As a human creation, it simply lacks the right kind of genealogy – a natural genealogy – thus it is ontologically inauthentic. What's more, insofar as it deceives observers into thinking it is natural, it is epistemically inauthentic as well.

The analogy, however, is misleading. In the case of the painting, there are fairly clear conditions for ontological authenticity: a work of art not created by Picasso simply is not a Picasso.[15] Yet in the case of natural landscapes, things are not so clear. Must a "natural" landscape be utterly free from human influence? If so, then it seems that we commit ourselves to the view that all so-called "natural" landscapes today "fake nature," insofar as no place on earth is entirely free from human influence. And if this is the case, then in order to make out the claim that restored landscapes are *particularly* inauthentic, we will need to treat "faking nature" as somehow a matter of degree, and clarify more fully why restoration is an especially problematic way to recreate "nature."[16]

A central problem with the ontological approach rests with the fundamental idea that a place can remain its authentic self through virtually any series of *natural* changes, but that any *human-induced* change transforms the place into something ontologically different, and inauthentic in relation to the original.[17] What many discussions of restoration as "faking nature" or as producing "inauthentic" landscapes have failed to do is to go beyond the binary categories of human/nonhuman,

[15] Ambiguities arise with respect to art restoration, however, and Light (2003) has argued that ecological restoration may be more akin to art restoration than art forgery. Jordan (2003, 125) suggests that restoration is better compared to a performing art, emphasizing process, than to a particular product, like a painting: this "performative ontology provides…a basis for the deliberate *creation* of the authentic, grounded in both archaic experience and in an ecological sensibility." See also Keulartz (2007) for a helpful review and discussion of the analogy between ecological restoration and art restoration or forgery.

[16] There are actually two distinct questions at issue here. The first has to do with whether human interference necessarily renders a landscape "ontologically inauthentic" *qua* natural area. As we suggest throughout, we are suspicious of this conception of ontological authenticity; hence, we doubt that the most relevant sense of epistemic inauthenticity is one that rests on this kind of ontological inauthenticity. Nevertheless, it remains true that the conditions at many restored sites are substantially the product of human influence, and also that these sites experienced prior human disturbances that changed them in significant ways. Thus, there remains a kind of epistemic inauthenticity concerned with the failure to disclose the role of human agency in shaping a particular landscape (even if we don't think that human influence *ontologically* transforms a site). This second version of epistemic inauthenticity raises a critical question, however: to be epistemically authentic, must a site disclose every detail of its past? This clearly would be too demanding. So the key question regarding epistemic authenticity is this: which features of a site or aspects of its history must be disclosed in order to provide genuine knowledge and understanding of the place? This is a complicated question, and as we indicate below, although we think there are clearly some *wrong* answers to the question (i.e., there are clearly some forms of deception, erasure, and lack of information that block genuine knowledge and understanding, and hence compromise epistemic authenticity), there may be no single, determinate right answer.

[17] Is it even possible to determine identity conditions for a place, or for an ecological system? This is clearly a challenging project, and the prospects for its success are controversial (see, for example, Sagoff 2003).

fake/real, authentic/inauthentic, and historically faithful/historically unfaithful to explore the complexities of these categories themselves. As noted above, if we treat every restored landscape as "fake" and "inauthentic," then we are committed to seeing huge swaths of the natural world in this light, even though different landscapes may be characterized by radically different kinds of disturbances and a wide array of approaches to restoration. The idea that human intervention of any kind compromises the value of a landscape provides little assistance in considering the unique characteristics of particular landscapes, and how natural and human processes interact there to create or destroy value.[18]

Thus, the view that *all* restoration "fakes nature" takes our attention away from the details of particular restorations, and how restoration can be more or less forthcoming in disclosing a site's history and more or less helpful in re-establishing a positive relationship between humans and the rest of the natural world. The related view that restoration can be authentic, but only insofar as it attends exclusively to the ecological conditions that prevailed prior to human influence, is also problematic: it overlooks the possibility that restored sites might legitimately include evidence of past human presence, and that the consideration of "human ends" in the establishment of restoration goals in many cases may be reasonable and desirable.

Turning to another specific example, consider the Rocky Mountain Arsenal National Wildlife Refuge, a former chemical weapons plant near Denver, Colorado. More than 200 farm families were displaced abruptly during World War II in 1942 to make way for the Rocky Mountain Arsenal, and in the decades that followed, the U.S. Army produced chemical weapons there, including lewisite, white phosphorus, sarin nerve gas, and napalm. In the early 1950s, Shell Chemical Company began manufacturing pesticides at the site, and military and commercial chemical production continued concurrently until the 1980s, when the site was slated for cleanup under the U.S. Comprehensive Environmental Response Compensation and Liability Act (CERCLA).[19] In 1992, a portion of the site was designated by U.S. Congress as a national wildlife refuge, and that refuge is currently open to visitors for wildlife viewing, hiking, and fishing. A new visitor center opened in May 2011.

Restoration goals at the Arsenal have focused on native plants and wildlife, emphasizing the ecological conditions that prevailed prior to Euro-American agricultural settlement in the nineteenth century. Bison have been reintroduced on the refuge, thousands of prairie dogs inhabit the site, and a sustained prairie restoration effort is underway. Cleanup and restoration have transformed this place from an industrial landscape into a more natural one: buildings and storage facilities have been removed and in many places, bare soils have been revegetated. Some chemical contamination remains, and the site is certainly not pristine, but visitors today who

[18] For an interesting critique of the idea that returning a site to its "natural state" is a defensible ideal in restoration, see Holland and O'Neill (2003). Holland & O'Neill (p. 222) suggest that we consider instead how best to continue the narrative of a place rather than focus on restoring its "natural state."

[19] U.S. Environmental Protection Agency, "Superfund Program: Rocky Mountain Arsenal," accessed May, 2011, http://www.epa.gov/region8/superfund/co/rkymtnarsenal/.

survey the landscape for the first time may have little idea what this place looked like just a decade ago.

It is undeniable that the Rocky Mountain Arsenal lacks an unbroken natural genealogy; it is very clearly a place that has been deeply shaped by various human uses, serving as hunting lands for Native Americans, farmland for Euro-American settlers, and military and industrial production sites for the U.S. Army and private corporations. What seems important about this landscape, however, is not so much that the natural communities that now dominate the site are "fake," or "inauthentic," in the sense that they lack the requisite continuous natural lineage. The site is one of the largest urban wildlife refuges in the United States, and it offers an important opportunity for diverse groups of local residents, as well as visitors from afar, to experience a prairie ecosystem and observe birds, deer, bison, prairie dogs, and other wildlife. In this place, to stress the ontological inauthenticity of restored prairie grasslands serves little purpose. The land has so long been under human influence that it would be strangely nostalgic to perpetually lament its loss of natural innocence. What is more, as William Cronon (1995) has pointed out, there are risks to a binary conception of nature and humans as opposed and mutually exclusive categories. If all places have been de-natured and we see them, accordingly, as irreparably "fallen" or sullied lands, then what reason do we have to care for these places, or to carefully think through our relationship to them? Yet as Cronon notes, it is just these places that we regularly visit and inhabit, and with which we frequently interact. Hybrid landscapes, where nature and culture co-mingle, comprise the core of our human habitat, and it is in these landscapes that we must learn to live well.

We can accept that the Rocky Mountain Arsenal is not pristine, yet still care about the restoration that takes place there. We can, further, consider restoration of this landscape in its rich and complex social and historical context. In this place, worries about authenticity focus less on the ontological and more on the narrative and epistemic, on how restored natural ecosystems may obscure the many significant activities and transitions that occurred historically at this site. Attention to epistemic authenticity draws our attention to what restored sites like the Arsenal refuge disclose about their past, and what they fail to disclose. We might ask, for example, what kinds of knowledge does the restored refuge land make possible, and what kinds of knowledge does it obscure? In many cases, a restored landscape itself can make visible a site's layered past,[20] but in other cases, narration of the site in visitor education programs, signs, and brochures, and on the web, can provide background and details no longer conveyed by visible evidence on the ground. It is not our intention to provide a specific set of rules or normative guidelines regarding the extent to which a given site should preserve its past, either in the processes and products of restoration or in the interpretative accompaniments to the restored landscape. However, we do introduce some key aspects of epistemic authenticity,

[20] See Drenthen (2009) for a discussion of "palimpsest landscapes" that make legible multiple layers of social and ecological history.

arguing that there is a kind of *in*authenticity worth worrying about at sites like the Arsenal refuge, specifically a kind of inauthenticity that restoration risks whenever it erases evidence of what came before.[21] Rocky Mountain Arsenal National Wildlife Refuge provides a case study from which we can draw some initial conclusions regarding the critical dimensions of epistemic authenticity in restored landscapes. The Arsenal refuge offers a helpful context in which to explore epistemic authenticity, for the history of the site is significant in myriad ways: it says something about the way in which the national defense can trump and displace persons and legitimate modes of land use, and sometimes on very short notice; it says something about negligence in handling chemicals at this site; it says something about our options and priorities once military use ceases; it carries potentially important lessons regarding disclosure, risk, citizen participation, and environmental justice; and so on.

In approaching epistemic authenticity, we can focus on two kinds of problems that can hinder its achievement. First, there are errors of omission, where the history of restored site is rendered invisible or remains untold. Second, there are errors of commission, where a site's past is portrayed tendentiously or without attention to the complexity of the place, its many meanings, and its diverse narrative possibilities. Regarding problems of the first kind: if future visitors were able to learn nothing about the Arsenal's complex past from the site and its interpretation, then arguably, they would be deceived in important respects, and there is a loss that accompanies this deception. The Arsenal's restoration would be inauthentic in the sense that it would fail to offer an adequate understanding of that place and how it came to be as it is today. Thus far, the U.S. Fish and Wildlife Service has made significant efforts to incorporate the site's history into its interpretive materials at the refuge. The visitor center contains exhibits detailing chemical weapons manufacturing at the site and displaying artifacts from this era. The agricultural and Native American histories of the site also play a role in presentation of the site. Until very recently, active cleanup work – including substantial earth moving and demolition operations – was ongoing at the Arsenal, and the visible reminders of military and industrial use have gradually, yet dramatically, receded from view. Without these obvious clues, visitors will be less likely to wonder and inquire about the Arsenal's past; yet this in our view makes questions of epistemic authenticity all the more pressing.

[21] Clearly, epistemic authenticity is a concept with important ethical content: we are concerned not merely with the question of whether restoration and its interpretation present truths about a site, but about *which* truths are presented, *how* they are presented, and so on. Epistemic authenticity is particularly concerned with the disclosure of *significant* truths, and significance can only be understood in terms of a framework of values (see Kitcher 2001). We are not trying to lay out specific normative requirements of epistemic authenticity in this paper, though we do draw on what we believe to be some widely shared ethical intuitions in our discussion of epistemic authenticity (for example, in claiming that to obscure or fail to convey the fact that Rocky Flats once produced nuclear weapons would be deceptive and ethically problematic).

We don't mean to claim that all restorations must preserve visible elements of past damage, or narrate in some way the legacy of a site's degradation.[22] Nevertheless, if one function of restoration is to help heal the relationship between humans and nature, as many authors have proposed (Jordan 2003; Higgs 2003; Gobster 2007), then developing a clearer sense of the way in which restoration mediates this relationship is important. Restoration is meant to erase or undo past damage, and our activities have damaged ecological systems in so many ways that it would be foolish to shun restoration in order to vividly confront the damage we have caused. On the other hand, there is something to the worry that restoration may provide false assurances, suggesting that no matter the insult, it can be repaired. The very fact that many former military bases have been converted to wildlife refuges – and not to housing developments, farms, or shopping centers – belies the truth of this supposition: naturalization of former military lands is an appealing option precisely because in many cases they cannot easily or economically be cleaned up to standards fit for crop production, commercial activity, or permanent human habitation.[23]

In practice, addressing the way in which sites and their narration make available genuine knowledge and understanding is a tricky matter. This brings us to the second challenge for epistemic authenticity: avoiding errors of commission in portraying the meaning, value, and history of a place. As Holland and O'Neill (2003, 223) note, at many sites "[t]here are different histories to which we have to be true" and no simple way to accomplish this. What's more, one may worry that certain restored landscapes or certain interpretive materials may overly constrain the opportunities for diverse understandings of a site. If, as seems likely, there are many legitimate narratives that could be conveyed by a particular landscape, then there are risks in imposing a single interpretation that displaces many others. Paul Gobster has expressed this concern in relation to what he calls the "museumification" of nature in urban parks. Gobster worries that "complex and sometimes unpleasant storylines are edited from the landscape" (Gobster 2007, 102); that restoration design may "[make] restorations into outdoor museum exhibits" by prescribing a specific pattern and flow of movement, for example, through the use of boardwalks and by labeling particular plants (and not others) (ibid., 105–106); and that carefully controlled landscapes may narrow nature experiences and reduce opportunities for unstructured exploration (ibid., 106–108). Gobster calls attention to yet another kind of authenticity, which he calls "authenticity of nature experiences," which he suggests involves relatively unstructured and open-ended opportunities to experience a place. Of course, any restored landscape, any interpretive sign,

[22] In some cases, this could be downright silly: surely it is not necessary that every instance of trash removal be memorialized in some sign, or that a few token pieces of trash need be left to prevent future visitors from falsely believing the site was pristine. Nevertheless, Higgs (2003, 147) emphasizes narrative continuity as an important element of restoration and suggests that narrative continuity "implies that we have unbroken knowledge or experience of something from the past," which seems to imply that restored landscapes should, in general, make available some understanding of their past.

[23] For a related observation on U.S. Department of Energy lands, see Whicker et al. (2004).

and any visitor's center will foreground certain aspects of a place and background others; the challenge is to find a way to restore a particular landscape that acknowledges relevant elements of its past and present, while also making possible a range of experiences and interpretations. To be clear, although there may be many legitimate narratives that a restored site can offer, this does not obviate the point that restoration and its narration can be deceptive and that epistemic authenticity is a legitimate concern.

At the Rocky Mountain Arsenal refuge, there may be many ways to portray the restored site that count as authentic, but any successful portrayal will acknowledge the site's complexity as well as the way in which its history remains a part of what it is today. For example, the restored landscape would not count as epistemically authentic if it conveyed the message that military activities and wildlife conservation are always mutually compatible, that the site is fully cleaned up and bears no marks of its chemical production history, or that all ecological damage is easily reversible.

Taking seriously concerns about the ways in which restoration and its interpretation help us to understand places and their past provides a way to address the concern that restoration may lull us into complacency regarding our ability to irremediably damage natural ecosystems. It may also help us see the ways in which the human and the natural intermingle over time, sometimes fruitfully and sometimes less fruitfully. And it may prompt us to find ways to remember places and events that are politically and socially significant, especially events such as wars, whose impacts and costs tend to be remembered through the lives of soldiers and civilians directly affected in battle, but less clearly through the ways in which military efforts and preparations for war can transform landscapes and lives thousands of miles from sites of armed conflict (Woodward 2004). In the western United States, especially, the legacy of militarization is very much with us – from nuclear testing, to uranium mining, to chemical weapons production (see, for example, Kuletz 1998; Kirsch 2005) – and we ought to take seriously not only how to address the physical residues of these activities, but their cultural and social significance.[24]

3.4 Conclusion

We have argued here for a reconception of authenticity in ecological restoration, focusing on the way in which restored landscapes narrate past, present, and future relationships between humans and the natural world we inhabit and of which we are a part, and how restoration may make possible certain kinds of knowledge while obscuring others. It may be helpful, in this regard, to think about restoration by analogy with human relationships, and to seek models in our human practices of

[24] For an interesting suggestion in this regard, see Misrach (1990).

reconciliation and memorialization.[25] In close relationships with others, we inevitably cause damage – we do and say things that hurt or offend. Yet, in general, the appropriate way to respond to such insults is not to treat the relationship as forever compromised and leave it at that, but to consider how best to go on. Reconciliation does not require fully forgetting the insult, but it does require acknowledging and determining how best to repair it. Similarly, in the restoration of sites with complex socio-ecological histories, authentic restoration requires the acknowledgment of what came before. In some cases, it may be appropriate to let go of the past, to allow a site's history to drift into obscurity; in other cases, understanding and making visible the past will be critical to our continued examination of the choices we make about how to treat the land and one another.[26] What seems clear is that restoration – particularly in places with complex and socially significant histories – raises important questions about how to address damage and degradation in ways that acknowledge and consider the significance of the past while also recognizing the possibilities for the future.

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[25] On memorials, see Foote (1997). On the general role of restoration in healing the human relationship with nature, see the work of Light, particularly Light (2008). Hettinger (2012) cautions against using restoration as a model for the human relationship with nature generally. Here, we are suggesting not that restoration serve as the central model for human relationships with nature, but that we consider what we understand about the reparative dimensions of human relationships as a potential source of insight regarding the reparative dimensions of our relationships with the natural world.

[26] In this regard, the idea of "restitutive restoration" may be relevant. According to Basl (2010), restitutive restoration has both a reparative requirement and a remediative one. Focusing on the latter, Basl argues that the remediative requirement involves *character* remediation (not remediation of the landscape itself) and is met by restoration that helps us develop habits of mind, patterns of behavior, and traits of character that help reduce rather than facilitate environmental damage. Epistemic authenticity in restoration may be important to such remediation, insofar as understanding critical aspects of the past and their significance, including the significance of past environmental damage, is important in developing more thoughtful and appropriate relationships between humans and the places we inhabit. Our concerns are somewhat broader than Basl's, however, because we want to draw attention to the fact that restoration can not only obscure past environmental harms, but also the history of various socially and politically significant choices and practices, such as the appropriation of land for military use and the production of chemical and nuclear weapons. Additionally, we are concerned not only with character remediation of those who caused past damage, but with the way restored landscapes contribute to the understanding (and relatedly, to the attitudes and actions) of all those who interact with them.

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Chapter 4
Conceiving the Earth Itself as Our Garden

W.S.K. Cameron

4.1 Introduction

Though this title lacks the hectoring tone of an earlier draft,[1] it may still raise alarm—especially in North America, where environmental activism, and thus environmental philosophy, has historically focused on the protection of wilderness. In Europe, as in most other places, protecting areas untouched by humans has been far less central after thousands of years of continuous human presence. In this chapter, I start from the North American context: not, as has traditionally been done, to defend a wilderness focus, nor yet, with those who started the recent wilderness debate, to contest it. In truth, I have strong sympathies on both sides, for while the contemporary wilderness critique may appear merely a recent and faddish application of the hip, post-Nietzschean, social constructivist view, it is also confirmed by some very ancient accounts of the power of naming. On those accounts too, the world was always already humanized: as our home, it was always already *our* world, and thus in trust our garden. Stars and planets may have existed on their own, but our world *as world*—i.e., as a special kind of whole—was and is neither comprehensible nor complete without us.

That said, there is nevertheless an important imperative in the romantic aspiration to commune with nature, to listen to it, to learn from it, to let it be. Through unfolding environmental disasters, we are discovering at great natural and human cost the folly of our willful blindness to "the whole creation … groaning in travail".[2] Our desire to become "lords and masters of nature" now finds us flailing like the magician's nephew, wildly introducing new problems with every effort to tame the old (Descartes

[1] "The Earth is Humankind's Garden; Get Used to It!" As I noted then, the hectoring tone—hardly a standard feature of academic prose—reflected my own initial discomfort with the idea.

[2] Romans 8:22, Revised Standard Version.

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1998, 62). Not only are our times "out of joint", longstanding ecological patterns that cradled and still sustain human civilization appear on the verge of collapse. To the romantic's urgent appeal for spiritual renewal, we must add the honest materialist's concern about the physical survival of our species—or at least, its survival without a brutal culling. We are long overdue to reflect with a new humility.

Clearly we need to find a new center to generate a more promising view. But how? I suggest working towards the middle from the constructivist side—not because, as some have contended, it has no (and thus no threatening) practical consequences, but because its practical consequences protect the aspirations of romantic wilderness advocates more plausibly and effectively than their own appeals to intuition and immediate insight. Our itinerary, then, will be as follows. Having briefly outlined the wilderness debate, I will take stock of both sides. From there, I will work towards a more inclusive view, starting from the constructivist side for reasons I will elaborate. Again my goal: to show that the constructivist critique actually serves the aspirations of wilderness advocates in ways both necessary and compelling.

4.2 The Wilderness Debate

The wilderness debate has a now-familiar structure that can be comprehended in a few broad gestures.[3] The modern environmental movement was originally inspired by the romantic rebellion against the apparent costs of the scientific and industrial revolutions: an ontological flattening of the world to dead, calculable matter; a spiritual encroachment on humans conceived as calculable too; the startling success of efforts to render the newly urbanizing mass societies dependably docile; and the threatening abundance generated by frenetic factory production of standardized but cheapened "goods" at horrendous environmental and human cost. No wonder people retreated in unprecedented numbers to the mountains, coasts, moors and deserts where—like the desert fathers long ago—they sought spiritual renewal and refuge from ugliness in places that had not been and apparently could not be mastered. In America, this impulse was compounded by a perception that the pioneer spirit had invigorated the "poor huddled masses" of Europe, challenging and inspiring them to imagine and create a new "city on a hill". Romantic yearnings and nostalgia for the rigors of a closing West converged in the late nineteenth century founding of the first great national parks in the US and Canada; and those parks in turn selected and shaped those who would forge the twentieth century environmental movement: people privileged with sufficient time and money to seek out places to "rough it". Virtually every church campground in the US and Canada repeats this theme: to get back to God, we must go back to nature—and that means a long drive, preferably into mountains.

[3] The debate has important precursors in oft-anthologized pieces like Guha (1989), and Callicott (1991). Holmes Rolson III responded with Rolson III (1991); and the debate really heats up with Cronon (1995). For many more contributions, see the two collections edited by Callicott and Nelson (1998, 2008).

The wilderness debate began when several lines of argument threatened this now-traditional North American consensus. Close reflection suggested that the very idea of wilderness was problematic on physical, ecological, historical, anthropological, and epistemological grounds. When the circulation of air and water left traces of our chemical creativity on the most remote and undeveloped regions, we could no longer physically distinguish the soiled from the untouched wild. Ecologically, settled and wild areas formed connected wholes, as the unfenceable consequences of global warming now showed. Historically, much of what European immigrants perceived as untrodden wilderness was in fact intensively managed by the first peoples here. Surrounded by unfamiliar flora and fauna, the immigrants didn't recognize the natural wealth around them, much less that it had arisen through long cultivation, because (in Jared Diamond's famous story) guns, germs and steel silenced the first peoples before the newcomers had the chance (even if they had the interest and humility) to learn from them (see Diamond 2005). The North American wilderness focus had thus taken a peculiarly atypical and misunderstood experience of nature as the basis of a radical nature/culture split—and thus its philosophical anthropology was skewed, occluding the one fate we knew we shared: "from dust we were made; to dust we shall return." Finally, the human-nature divide hid another epistemic fact: we could not even conceive wilderness except in contrast with human settlement. In all of these ways, according to the critics, wilderness could neither exist, nor even have been conceived, on its own.

To be sure, we apparently distinguish degrees of impact, imagining the world apart from some of our projects, and thus as relatively more wild. But even this hope fades when we consider a related question. Anna Peterson helpfully distinguishes between the ideal and the practical construction of nature: we construct scientific accounts of nature, but we also physically manipulate huge tracts of land (Peterson 1999). Perhaps—no, surely—we ought to respect tighter limits on the latter project, but that renews the challenge of conceiving nature apart from human plans and projects; and here we seem hobbled by the necessity of conceding Hegel's point: that the other—here wilderness—is always an other *for us*.[4]

4.3 From Post-modern Challenge to Ancient Hebrew and Paleolithic Precursors

Some see the critique of wilderness as a late revival of the post-modern, social-constructivist perspectivism so powerfully explored by Nietzsche. And certainly it appears that. Beginning in *Gay Science*, Nietzsche's effort to think through the

[4] Here it's worth highlighting the dual nature of the wilderness critique: it has both a quasi-empirical and an epistemic side. The physical, ecological, historical and anthropological arguments justify an empirical claim: that the boundary between humanized areas and untouched wilderness no longer exists, and likely has not existed for a very, very long time. Most of my argument below will focus on the epistemic claim, however, both because it is less obvious and because—properly understood—it allows us to recognize the legitimacy of the wilderness critique without relinquishing the aspiration to set aside and protect wilderness spaces.

death of God was radical not in its atheism—by then, the complacent skepticism of academic and market mavens was sufficiently common to be the main target of the famous "madman" aphorism—but rather in Nietzsche's search for the "shadows" of God that would-be atheists still served (Nietzsche 1974, sections 108–109, 125). Like Ludwig Feuerbach and Karl Marx, Nietzsche rejected longstanding presuppositions about divine capacities in terms of which we made invidious comparisons to our own. More threateningly to his contemporaries, he also rejected the modern faith in human capacities that illegitimately deified *us*: the faith in our senses, our virtues, our logic, and "pure" knowledge.

Against all such shadows, Nietzsche insisted on loyalty to "the body", to "the earth"—a loyalty reflected in his insistence that the only possible truth was finite, embodied, and partial—one that might, after all, appear mistaken on some further view. Yet if this finite partial view was nevertheless the most divine insight we could muster, it made us, in another sense, creators and gods. Whatever one think of Nietzsche's ultimate success—and I, at least, have reservations—he does repeatedly and eloquently insist on owning our perspectives. There have been too many compelling arguments for some version of "standpoint theory" to ignore Nietzsche's general claim: that the severe, quasi-monastic disciplines of science have finally revealed the limits of science itself.[5] We cannot see the world—or any part of it, including wilderness—in itself.

Any tie between the wilderness critique and Nietzsche is dangerous, however, for he himself is a lightning rod—easy to dismiss (to switch metaphors) as smelling too much of the study, his thinking the symptom of a culture so deeply alienated from the natural world that it cannot even conceive it in its integrity. Yet the contemporary wilderness critique is not just one more take on a now-faddish po-mo view, for Nietzsche consciously revived a far older, ancient Hebrew conception of language according to which Adam and Eve, as namers, helped complete creation. In the biblical view, names are not mere labels, for they express and complete a thing. Nor is this the only instance. Humankind's singing the world into being and helping maintain its integrity is the core of the cosmogony shared by widely dispersed and linguistically diverse Australian aboriginal groups,[6] something Nietzsche couldn't know, though he identified another analogue in *The Birth of Tragedy*—viz. the ancient Greek dynamic whereby Apollonian order/reason/word (*logos*) made possible a breathtaking glimpse, if not the full grasp, of Dionysian depths. To be sure, even if all these interpretations were incontestably accurate and further examples were multiplied, neither their ancient pedigree, nor their agreement, nor their diverse provenance would secure their truth. Yet recognizing ancient precursors

[5] For several reasons I find standpoint theory compelling and for an answer to its most pressing critique, see Cameron (2005).

[6] Interestingly, the rhythm of Aboriginal songlines played a critical role in their communicative power, allowing them to be shared across linguistic barriers so that songlines native to one area and group could be shared with others in cross-cultural exchanges that could orient people across continent-wide journeys. For additional background on the Australian example, I found a helpful brief introduction at http://www.artistwd.com/joyzine/australia/abr_culture/songlines.php (accessed Dec. 2, 2013); for a much fuller discussion, see Stubington (2007).

to postmodern views at least relativizes the Platonic assumption that has governed most of the history of philosophy—that words are mere signs, and that the "flight to the logoi" is a second best path, because words, as referring labels, do not carry the full richness of being.[7] That standard view may have governed much of Western philosophy; it clearly has not governed the whole history of human thought. In this longer context, I don't think it reckless or even especially radical to start from a constructivist position. But naturally I'll need to be clear about what I take this to mean.

4.4 Constructing the Call of the Wild?

It would take a book merely to categorize all the forms of constructivism that have emerged over the past 200, and especially the last 50, years. Clearly I cannot rehearse, much less respond to them all. Yet we can't avoid walking these moors, foggy though they be, because while my goal is to work toward a middle position, we must start from the constructivist side. Why? Constructivism is the consequence of recognizing that we have no direct, unmediated access to the real—a conclusion common to major continental and analytically-oriented philosophers otherwise as diverse as Heidegger, Wittgenstein, the classical American pragmatists, and Quine. In the face of converging arguments for the linguistic turn, many objections to the "construction of wilderness" thesis simply cannot stand.

Eileen Crist, for example, offers several telling arguments against forms of constructivism more radical than I would espouse, but seems to take *all* forms to trade on a problematic narrowing of the ways we represent nature:

> The choice of anthropocentrically slanted vocabularies—that construe knowledge through metaphors of labor, political-legal deliberation, or meaning imputation—systematically erases the diversity of language games available to describe representational activities. Representations can be, and are, said to distort, imaginatively project, misconstrue, misinterpret …. Representations are also variously describable as interesting, beautiful, suggestive, … persuasive, compelling, or obvious. None of this variety is heeded by postmodern constructivism. (Crist 2004, 10)

[7] Here I'm assuming a standard reading of Plato, one affirmed and developed by the young Augustine, that language involves speakers translating a wordless intellectual grasp of being into word-signs that are communicated to listeners who retranslate the word-signs back into wordless insights about being. Plato (1993, 99d–100a) suggests this "flight to the logoi" in the *Phaedo*, where he observes that we cannot see the Sun directly and so need recourse to words; Augustine (1995) elaborates this view of language in *De Doctrina Christiana*. Wittgenstein (2009) famously takes Augustine as expressing the standard view of the relation between language and being, and that is the target of his critique in his *Philosophical Investigations*. Some have argued that St. Augustine did not in fact hold this standard view: see, for instance, Louth (1989), and Watson (1982). But regardless of Plato's or Augustine's actual views about language, Wittgenstein seems right both that this was the view they were taken to have held, and that this view was historically very influential.

Crist is right to note the voluntarism of many arguments for constructivism, their emphasis on what we do or agree over what we feel compelled to see as "just there". But Crist's appeal to "the diversity of language games" does not make, but rather undermines her point, for Wittgenstein's late work on language games drew on his private language argument. If we cannot stably and reliably identify any aspect of nature as private individuals, then both our access to and our representations of the world must be socially mediated. We have already granted the social and linguistic construction of nature.

Again later in her paper, Crist appeals to science as a bulwark against social construction. She concedes the "fluidity of science" and grants that empirical studies revealing science to be "polemical, political, value-relevant, theory-laden, … or paradigm-dependent" at first appear to broaden our view of science. Yet she continues: while this "seems a tenable substitute for a previously idealized view, on closer examination it often conceals the fact that stable scientific facts about the natural world are legion and amassing" (Crist 2004, 16). Crist is right to worry that many academics uncritically use science studies to justify a sloppy and dangerous relativism, and worse, that many powerful economic interests use debates around the margins of scientific consensus to postpone acknowledging, much less redressing, pressing ecological concerns. Yet our confidence that "stable scientific facts about the natural world are legion and amassing" does not disprove the constructivist claim. Indeed our confidence that such facts are "legion and amassing" is rooted in their provenance through a method designed to generate more adequate theories over time by forcing us to test and relinquish older, less well supported ideas.[8] Far from offering a bulwark against constructivism, science provides one of the clearest examples of the way theory construction generates progressively more dependable views over time. Realists may be tempted to claim that if all theories up to the penultimate one are mere constructions, the final one, at least, will *really* be true. Yet given the history of science in the nineteenth and especially twentieth centuries, what astute scientist would have the hubris to claim that her theory was the final one? To give up testing one's theory is not to realize, but to abandon the scientific method. To be sure, over time results accumulate and appear quite secure. But even those views may fall again into question, as when Einstein showed that the apparently obvious concept of simultaneity was in fact context-relative, or that what had appeared the fixed mass and length of an object would change as it approached the speed of light.

Finally, it's insufficient just to appeal to ordinary language or Wittgensteinian language games, insisting that we know what we mean by "wilderness" and "nature" even if we cannot now find any environment unaffected by human actions. Nor is it sufficient to insist that our concept of wilderness need not mean "entirely untouched," since ordinary language allows us to acknowledge that wildernesses have a history of human interaction. As we will soon see, constructivists too must recognize a

[8] The claim that science *does* this has been contested, and descriptions of *how* it does this (assuming it does) are even more vexingly various. I can't here defend the claim that science makes progress, much less take a position on how; all I can do is gesture to the fact that when it counts—as when one has a serious disease—most of us turn unhesitatingly to the latest research.

concept of nature "beyond language" and "independent of us," whether or not such places actually exist. But in both cases, the question is not whether language admits these ideas—clearly it does—but whether they are possible through, and only through, language.[9] If so, ordinary language is no alternative to, but an instance of, the linguistic and thus social construction of the natural world.

If the considerations above suggest working to the middle from a starting point on the constructivist side, we must yet acknowledge the real worries that constructivism raises, problems that are too often minimized or ignored. Crist is right to worry that the glee with which some in the humanities or social sciences have globalized the suspicions raised by science studies reflects their resentment of the prestige accorded the hard sciences. And what of constructivism's apparent implications? If the only possible knowledge of nature is a human construction, is the reality and determinacy of the nonhuman other not completely obscured? Doesn't constructivism represent anthropocentrism run amok, aiding and abetting our global domination of nature?

Certainly we should be more worried than some constructivists have conceded. J. Baird Callicott, for instance, claims only to criticize the "*received wilderness idea*, the conventional concept of wilderness, not (so-called) wilderness areas" (Callicott 1995, 64); and William Cronon states that his critique takes aim not at "wild nature per se, or even efforts to set aside large tracts of wild land, but rather at the specific habits of thinking that flow from this complex cultural construction called wilderness" (Cronon 1995, 81). Yet such reassurance is wan. One cannot describe, let alone justify or maintain, large tracts of wilderness without *some* viable concept that captures the point of such efforts. And if wilderness advocates are right—as I agree—that such areas offer rich opportunities to learn about ourselves in relation to others, and certainly richer than those we gain in a mall, then we need some functional concept of wilderness around which to focus our advocacy.[10] We cannot merely fall back on ordinary language, or on inarticulate intuitions, if we are to restrain the human conquest of the planet.

Stanley Fish limits both our worries about and our hopes for the constructivist thesis by arguing that it's merely an epistemological claim that has no practical consequences (Fish 2011). If gender roles, for instance, are constructed, this does not by itself tell us whether they should be affirmed or overcome; and if we recognize theoretically that a particular perception is linguistically constituted, there's no

[9] Clearly even thoughtful people—or at least I—can believe all sorts of inconsistent things. When I come upon a discarded candy wrapper while hiking in the bush, I find myself irritated by the collapse of my naïve perception that I'm "alone in nature". But of course that belief always was an illusion—it's one I enjoy, but also one I know is wrong as soon as I reflect that I'm walking on a trail made by others. Undoubtedly we negotiate the bumps between our understanding of nature as untouched and our recognition that it has a history. But again, recognizing both the existence of and the potential tensions between different conceptions of nature is possible—and only possible—through language.

[10] That said, the conference at which the first draft of this chapter was originally read included Steven Vogel's paper "Thinking like a Mall," (in Drenthen and Keulartz 2014, 174–187), a paper in which Vogel plays off Aldo Leopold's phrase "Thinking like a Mountain". Perhaps I am tone deaf.

way to "un-see" it until some other (also linguistically constituted) alternative emerges. There is something right in Fish's claim, but also something wrong: knowing that the world is constructed tells us that we must be open to what resistance the world may offer, for it may not actually be as we have constructed it. Fish is thus right that the epistemic emphasis of the social construction thesis leaves many practical questions undecided. But it does not leave them *all* undecided; the thesis does have practical implications; and contrary to common expectation, the most important of them actually undergird old romantic aspirations to a surprising degree, and in some respects better than the intuitionism to which both naïve realists and romantics usually appeal. To see this, however, we must chasten the claims of constructivism.

How so? The underlying metaphor emphasizes the role of human creativity in knowledge formation, and thus the gap between the terms we use to know the world and the world so understood. But constructivism need not, indeed cannot, nominalistically dissolve the world. For in the first place, the metaphor of "construction" draws attention to the "surplus"—the extra-human world that our constructions grasp—as Ian Hacking notes in the clever title of his book, *The Social Construction of What?* (Hacking 1999). Second, constructivists need not deny that the extra-human world has its own structure. To be sure, they may doubt that our conceptual structures cut reality "at the joints"; and in fact the metaphor suggests humility on that question. Yet it does not entail that the world has no such structure, nor that, over time, we can better approximate it.

Indeed to recall a point already mentioned, the most obvious examples of the progress of science are the ways that the extra-human world resists our theories to reveal the limits of our current view. Since Kuhn, many have emphasized the relativistic consequences of conceding that we have no access to bare sensa and thus no knockdown proof of any scientific paradigm (Kuhn 1970). Yet the features that make science so remarkable are two: first, a principled commitment to seeking new observations that call earlier theories into question; and second, the willingness to jettison old theories in favor of new, more adequate ones. The science studies that developed in the wake of Kuhn revealed sociological limits to the openness of researchers and schools, the role of available metaphors, technologies, interests, and ignorance in tacitly guiding research, and the consequence that longstanding squabbles between paradigms never end cleanly. But as leading figures in science studies including Evelyn Fox Keller (2009) and Brian Wynne (2009) have insisted, to argue that knowledge claims are socially constituted and negotiated is not thereby to exclude the claim that they may be true. The point of theory construction and social negotiation is precisely to describe a world we experience as impinging on us in ways that confirm and—more importantly—disconfirm our preconceptions.

Thus when it counts—for instance when deciding among contending medical treatments—we look to the latest developments in medical science. And surely we're right to do so: on the whole, we gain better accounts over time—which means both that older accounts, when rightly understood, were "just" approximations of the truth, and also that our best current accounts, which may soon be supplanted, are unlikely to be the whole truth either. We need both confidence that our theories

capture aspects of the real, and the humility to recognize that they are nevertheless partial and likely wrong in ways we cannot now see.

Yet we need not reach as far as revolutionary science to make this point, because it receives confirmation much more often and closer at hand. In ordinary experience, the world surprises, resists, and challenges our presuppositions. On this view—one I adapt from Gadamer's philosophical hermeneutics—the concepts we inherit provide our first take on the world. But those concepts are not static; they are continuously applied and modified over time as negative experiences (i.e. disappointed expectations) draw attention to their limits; and the goal is to produce a more adequate grasp of the world than the one we started with.[11] If knowledge is constructed, we are not thereby forced into relativism. Or better, we must accept that our knowledge is related to and dependent on its linguistically-structured context, but it is also related to the world our concepts were constituted to reveal. What Gadamer offers is a very concrete, historical account of knowledge that highlights how we modify concepts to reveal the world—our past, our present, and our possible futures—more richly over time.

To illustrate this process, consider the following. Second wave feminists in the 1970s problematized several traditional terms like "chairman" for their implicit suggestion—historically true but no longer appropriate—that the occupant had to be a man. And after the 2008 race for the US Democratic Party nomination, the traditional pundit's question whether Hillary Clinton or Barack Obama looked "presidential" had to be reinterpreted in dramatic new ways when Obama won the Whitehouse and put his opponent in the powerful position of Secretary of State. Concepts shift over time as they are applied in new ways in response to new experiences, and this opens the possibility of new interactions and insights.

I take a hermeneutic account of the natural world to have four key features. The first is that we have the world through—and only through—language. In Part One of *Truth and Method*, Gadamer makes this claim by critiquing the romantic theory of genius. The problem with identifying great art by its capacity to evoke some inarticulable aesthetic intuition is that it renders the experience of art irrelevant to our everyday lives and incapable of informing society: at both levels, on that view, the supra-conceptual nature of aesthetic intuition prevents our articulating what art means and thus how it should be integrated into experience. Rather than summarizing that long argument, however, we can turn to another closer at hand. Following Heidegger, Gadamer (2004, 436–51) defends the claim that we have the world through language by contrasting our experience with that of other animals which are, as far as we can tell, "poor in world": they apparently lack the ability to conceive distant times and spaces or the world as a whole.[12] My dog gets excited when

[11] Lest it not be obvious, Gadamer talks of "negative" experiences in the Hegelian sense as *good*: disappointed expectations offer both new insight into the limits of our old view and a standing challenge to refine it further.

[12] A few years ago, an anonymous reader drew my attention to a spate of books exploring animal awareness. Each claims that there is far more going on in animal minds than we have imagined, but none attributes the kind of conceptual awareness that Gadamer takes as critical to knowing the world as world. For a closer look, see Hauser (2000), Griffin (2001), Bekoff (2002), and Bermúdez (2003).

I pick up the leash, but has no way to make sense of my response, "sorry I'm busy; let's go for a long walk next Tuesday." Humans, by contrast, can conceive the world not just now but *then*, not just here but *there*, not just in this accessible or visible part but *as a whole*, or even *without us*—and we can do so, and can only do so, through language, which alone enables us concretely to intend what is not and cannot be directly experienced.

The second feature of a hermeneutic account is that particular languages hand down particular local and historical views of the world. Gadamer could have made the first claim, that we have the world through language by means of Hegel's argument against sense-certainty—i.e. that we can only ever understand a particular "this", "here", or "now" as conceptually mediated by all other "thises" that exist in all other "theres" and "thens" (Hegel 1979). With this second commitment, however, he follows Heidegger in rejecting the hope of rendering phenomenology scientific either by completing it in a Hegelian system of concepts or by anchoring it in a Husserlian eidetic science of pure intuition. On Heidegger's analysis, Dasein is a "thrown projection": it is thrown to a particular "there" from within which it understands itself and its projects.

As Gadamer develops this insight, Dasein comes to awareness in a particular local, historical language that gives it its first orientation to the world. Gadamer's scandalous rejection of the Enlightenment "prejudice against prejudice" reflects his confidence that although languages cannot be finally secured through reason or sense data, they can nevertheless be trusted on the whole. Languages are adequate because they capture and communicate the common experience of communities; if they did not, problematic concepts would have been modified or jettisoned long ago.[13] Yet Gadamer is no mere traditionalist. His "rehabilitation of authority" is based on our common experience that we find authorities (our doctors, for instance) trustworthy sources of advice; and at the same time as he recognizes the legitimate role of authorities, he hedges their claims by acknowledging that we continually test their accounts against new experiences (Gadamer 2004, 278–299). Gadamer's fundamental insight is an Aeschylean one: that the "experienced" person is characterized not by the dogmatic reaffirmation of prior belief, but by the openness to new experience that characterizes the genuinely wise. In this sense, "experience is experience of human finitude" (ibid., 351).

The third feature of a hermeneutic account is that insight and ignorance are intertwined, and that the light that our concepts throw on some aspects of the world casts other aspects into shadow. To take just one instance, construing nature as a machine has revealed much of the world, but early twentieth century physics and late

[13] Gadamer's rehabilitation of prejudice—a scandal to enlightenment ears—has been met with fierce resistance, most famously by Jürgen Habermas, who interprets Gadamer as saying that we're ontologically bound either to the conservative affirmation of tradition, or to its radical but rationally unjustifiable rejection. For Habermas's original argument, which has been picked up by countless others, see Habermas (1977). For a broader look at the issues and my own response, see Cameron (1996).

twentieth century biology are testing the limits of that metaphor. We cannot tell what more capacious view will emerge unless and until it has done so—still less can we see in advance of experience what the limits of that new perspective will be. Moreover because languages were created to articulate human experience of the world, they presumably cast a characteristic (and perhaps distorting) light on the nonhuman. We shouldn't be any more surprised that anthropomorphism emerges in our descriptions of nature than that it does when we conceive of God: in both cases we rightly recognize a danger, but it's an inescapable one. Even the most determinedly biocentrist advocacy of wild nature must admit a degree of epistemic anthropocentrism: for while one may insist that other creatures have a value for themselves that we should cherish independently of their value for us, any possible interpretation of that independent value will be colored by our experience of what we can conceive as valuable. The point, again, is not to deny that we can conceive the world as valuable, but rather to recognize that our sense of the world's independent value is mediated by our own experience.

A fourth feature of a hermeneutic account concerns the inner infinity of language, which Gadamer takes to mean that no possible insight is out of bounds. Though we start with a particular, local language in which both insight and ignorance are intertwined, we are not, as Habermas fears, trapped within traditional worldviews or only able to escape them by a rationally unjustifiable act of will. On Gadamer's account, language doesn't give us merely a "worldview", but rather the world itself. Disagreements that arise between ourselves and others, in consequence, often create consternation as we grasp that what's obvious to us isn't obvious, or even likely, to another; conversely, it's hard to credit another's competing testimony when our own experience appears so intransigently insistent. Yet if goodwill permits or necessity forces us to continue our conversation, we can and often do learn not merely that the world can look otherwise to another, but that it may eventually look otherwise to us ourselves in the light of another's insights. It can be especially tough to come to a common language where large historical or cultural gaps separate interlocutors, but even there the pressure of misunderstanding often forces us to sharpen and modify our view in the light of new experiences or contested expectations.

In sum: we can gain new insights over time—but need not and will not if we lapse into inattention, insensitivity, or dogmatism. Yet no possible growth in insight will free us from the fact that our view, as finite and interpretive, is also interwoven with under- and overemphases that only new experiences will reveal. We must always hold ourselves open to the discovery of error. And with Heidegger, Gadamer insists that every revealing is also a concealing. Concretely speaking, it's hard to learn a third language without some cost to the second one has acquired, and more generally, new insights and competencies often come at some cost to old ones. Against the enlightenment's facile faith in unalloyed gains, Gadamer holds up the Aeschylean insight that we learn through suffering precisely because the most profound self-knowledge is the knowledge of our own limits (see Gadamer 2004, 350–51).

Thus language not only gives us an initial orientation to the world, but the tools we need to reorient ourselves in the light of new insights. To be sure, we cannot hope for an infinite or ultimate vision. In the light of the possibility—indeed the inevitability—of correction, Gadamer concludes both that our current concepts capture some truth (indeed more, perhaps, than we now know) and also that no finite human concepts capture the complete Truth. Or better, they intend that truth, but carry out that intention only through the "inner infinity of language" that allows us continually to supplement and refine our current perceptions. Sometimes we even suspect the limits of our current concepts without having the experience or insight to grasp their partiality in a determinate way. Gadamer never denies the experience of the ineffable, or that the world can and surely will be described very differently. Yet when we change our view, we do so because the old view has foundered against some new and surprising experience or application. And this represents not merely the limits of our current concepts, but their plastic power to accommodate new experiences, thereby capturing the world yet more adequately. The moment of perplexity during which we think, "wait, that's not quite right", is the first contraction of the intellectual labor by which alone we bear new insights.

4.5 The Virtues of Admitting that We Construct the Call of the Wild

While I have made the case above quickly—and likely too quickly to be quite compelling—my initial goal was to suggest the theoretical fruitfulness of adopting a generically constructive and specifically hermeneutic account of nature. The implications of such a view are both less radical and more salutary than its opponents have taken them to be; indeed as I'll argue now, such a generically constructive and specifically hermeneutic view can serve the aspirations of wilderness advocates more effectively than the empiricist or romantic intuitionism to which they usually appeal. As I see it, this view has three main strengths.

The first advantage is that owning our constructions forces us to confront their limits. Admitting that we "construct" the call of the wild forces us to acknowledge how we have done so, thus opening up the question whether our interpretation of wilderness has occluded aspects of the human-independent world we intend to protect. For such oversights are not only theoretically possible, we have had several clear examples. To recall just one: fires were suppressed from Yellowstone National Park's 1872 founding until the 1968 policy shift recognizing their critical role in the ecosystem; and thus our overall aim of preserving the land and animals as wild was frustrated by a human intervention that blocked a vital ecosystem dynamic. To the extent that we are explicit about how we have understand the park as wild, we open the possibility of discovering ways that our characterization is shortsighted.

But why start with a concept in the first place? Why not rely on empirical or romantic intuition and focus directly on "what's there"? The primary virtue of constructivism, in my view, is just here, with the romantic or biocentrist who thinks he has access to the wild world directly. Humans have had a long and unjustified confidence that they see the significance of wilderness (or its value for itself, or its meaning) directly, and this confidence sets us up to ventriloquize nature and, worse, fooling ourselves into forgetting our responsibility for "its" words. Put positively, the virtue of admitting, owning, and taking responsibility for our construal of the wild world is that we may then continually strive to replace it with a better one. This is the second advantage of a hermeneutic approach.

Hegel's old argument still haunts: every construal of the "wild" world, the world "without us", begins by conceiving that world as the other of ourselves. But as we saw in the last section, that is not a permanent barrier to insight, for we continue interacting with that world in ways that can reveal the inadequacy of our initial presuppositions. We'll do that consciously and effectively only insofar as we maintain an appropriate humility about our current concepts—and again, I think that this is more likely when we recognize those concepts as ours in the first place. I admit, and indeed value, the romantic insight that spending time in wilderness can challenge and refashion our self-perception in ways that we cannot anticipate or control. But my question is the more immediately practical one: if we're to preserve lands as wild, we need a way to conceive them as such; and the best way to maintain humility about the possible limits of our conception of wilderness is to recall and own it explicitly.

I argued above that the linguistic turn shows some form of constructivism to be inevitable—i.e. true—but my point here is to recommend its salutary effect. Consider old stories of the Roman Triumph—that parade during which particularly successful generals were celebrated with a march through Rome. On some versions, the state would hire a slave to stand behind the general, holding a laurel wreath over his head but protecting him from hubris by whispering in his ear, "remember, you are but a man." This story has been recently been challenged as apocryphal or, at best, stitched together (Cf. Beard 2007, 82–88). But my argument is meant to have a similar effect: the more that we admit and own our conceptual handiwork, the more likely we will recognize and redress its limits.

I close by insisting that while we need far more humility, our humility need not be scraping. The linguistic capacity that evolved in our forebears over eons has given us the capacity—perhaps unique, but in any case undeniable—to bring the world before us in language. That same linguistic capacity gives four further gifts: first, the capacity to conceive the world before us in determinate ways; second, the ability to contrast our current expectations with what we actually see happening; third, the ability to correct the inadequacies of our current view by refining it over time; and finally, the ability to intend—if perhaps never to achieve—an undistorted grasp of the world. Unlike sense experience, language brings the world before us as a whole; unlike the romantic intuition of some ineffable whole, language grasps the world in determinate, communicable, and

revisable ways; and unlike both empiricist and romantic intuitions, our linguistically constituted conception of the world can be set against our current experience with an eye to achieving a more perspicuous view.

4.6 Socially and Linguistically Constructed …. Perhaps. But Constructed as a Garden?

Yet so far, my title may appear radically deceptive. I've been arguing for the virtues of admitting our construction of the natural world, yet the title suggests we construe it, in particular, as a garden. Why choose *that* image? I find the following two reasons especially compelling:

First, to leave wildernesses alone will, in many cases, mean abandoning it to die. Admittedly, this metaphor overstates the case in one respect, since as destructive as we humans have been, we cannot destroy nature itself: the Earth has gone through several major extinction events before the current anthropogenic one, and the result of each die-off has been a new explosion of life's fecundity.[14] Yet having recognized our species' now-planetary influence, we must reconceive the Earth as a garden if we are to have any hope of passing on the variety of natural riches that we have inherited.[15] Clearly we'll need more seed banks, since without saving many of the millions of species under threat, our already catastrophic losses will be all the greater. But far more dramatic interventions may be necessary.[16] Already, both insects and plants are threatened because global warming has thrown off the symbioses within which they evolved: plants that provide spring forage bloom too early, denying migrating insects food; and worse, since the plants are pollinized by the insects, fewer and fewer seeds reproduce to sustain the cycle going forward. Worse, insects are relatively mobile, but trees and ground cover are not: over generations they can creep up mountain sides if they need relatively cooler air to flourish; but once the top gets too warm, they're not so good at jumping or mailing their seeds the tens or even hundreds of miles north that might be necessary to thrive again.

In such a context, to preserve individual species—or worse, whole interdependent communities—by moving them clearly represents a dramatic and arguably violent intervention, not to mention the knock-on effects for other species displaced to make room. Given the repeatedly rediscovered and hopefully now more obvious limits of our foresight, we should only consider such initiatives with the greatest of caution. But the alternative may seem worse: if we fail to move plants and animals

[14] To be sure, any new explosion is likely to be far too late for us to appreciate.

[15] Bill McKibben's stunning title, *The End of Nature* (McKibben 1989), drew attention to an unavoidable empirical consequence of anthropogenic climate change: however nature will yet change, we can no longer think of it as flourishing independently of us. Because we have inadvertently manipulated one of nature's fundamental constraints, some ecosystems will disappear unless we intervene.

[16] I've just hinted at the main issues in the text; for a much richer discussion see Harris et al. (2006).

from long-established niches to new ones, they will not survive our rapidly warming world. We could just accept that, and may even think it preferable to let species and ecosystems adapt or die on their own rather than to undertake massive re-engineering projects. Perhaps future generations may thus learn from our past hubris and late-grown humility. Yet my point is that we cannot evade the question: for we are not only responsible for the current destructive changes, but alone are capable of doing something to mitigate their consequences for the environments we've inherited. Whatever we conclude, we're making decisions about a world in which we could and perhaps should intervene—i.e., about the Earth conceived as a garden.[17]

Second, regarding the Earth as a garden recognizes and emphasizes our responsibility. This point will be a quick one, for it is simply an application of the general practical argument for constructivism above. For reasons that are well known if not, to me, persuasive, many are leery of the biblical charge to steward our earthly garden, and others doubtless find this ancient charge colorful but uncompelling.[18] Yet as evidence for the reality and pace of global warming mounts, the planetary scope of our influence only becomes more apparent both in the magnitude of the problem and the scale of the geoengineering solutions that some now see as our only hope. Whether we start down that path or not, thinking of the Earth as a garden at least forces us to acknowledge both the necessity for decision and the responsibility we share for whatever choices we make.

[17] Above in the text, I qualified the claim that wilderness might die, yet in another sense, that will happen willy-nilly: either we leave it alone, thereby condemning some of the wildernesses we've inherited to decay and death, or we intervene, thereby inviting the rebuke that the replanted environments are no longer wilderness in any significant sense. Part of the motivation of questioning the received sense of wilderness is to mitigate the latter worry, but in my view it's an inevitable and reasonable one. We face a forced choice: given the speed of climate change, some types of wilderness will not survive without extensive management, and even if we let those areas adapt on their own, they will be adapting to a new climate that we have played a large role in creating. Whatever response we choose—or as it now appears, fall into—we'll determine much of what survives into the future. We're stewards of this world, whether we want the role—or think it a good one to have—or not.

[18] The locus classicus for this worry is White (1967). While I cannot respond to the suspicions that White raises at any length, it seems to me that Christianity as such was not the problem (otherwise why did Eastern Christendom have such a divergent experience?), nor the doctrine of creation as such (else in addition to the Christian East, why were Muslim and Jewish thought not compromised?), but rather something that happened specifically in the West after the break with the Eastern Christendom. My nominee: the movement—more deist than Christian in inspiration—that discarded the metaphor of nature as organism related and responsive to divine and human care for the modern metaphor of nature as a machine over which we could legitimately aspire to become "lords and masters" (Descartes). Such attitudes seem far more problematic to me than the gardening and stewardship metaphors that informed classical and Christian thought about nature in both East and West through the later middle ages.

4.7 Objections and Replies

Before concluding, we should consider three brief objections. First, one might object that the metaphor of gardening is profoundly anthropocentric, for on one common view, gardening involves marking off an area, tearing out native plants, and then planting non-natives that survive only via intensive life-support in the form of water, fertilizer, and pesticides. Yet this is neither the only nor the best conception of the practice and meaning of gardening.[19] There are many kinds of garden, after all: English and French, exotic and native, floral and vegetable, traditional and factory farm. To conceive the Earth as a garden, then, highlights but does not resolve all the most pressing practical problems. Some gardens are cultivated aggressively to bring attention to a house or plot of land; others are cultivated aggressively for food; some grow mainly as an outlet or hobby for the gardener; others, to introduce us to exotic species we'd never otherwise see; still others illustrate the beauty or fecundity of native flora; and many, finally, grow under more or less benign neglect. Even Leopold's famous Wisconsin farm was a garden too, though one cultivated to recall and restore an ecological connection to a richer, more vibrant pre-agricultural wood and prairie. Moreover what grows, as every experienced gardener knows to her pleasure and (perhaps more often) to her chagrin, is only partly a function of the gardener's decisions. The land has a history and habits of its own, and the way we cope with these, as also with the humans around us, may be mutually beneficial, mutually destructive, or many things in between.

Indeed even the forest we visit and relish as (relatively) untouched is, for the time we're there, our home, our place of recreation, respite, renewal, reawakening—perhaps even a place where we are re-energized to protect more spaces from exploitation. Even aspiring biocentrists can care for other species, attribute value to them, and leave them to flourish alone only by identifying, describing, and protecting a space for them. Good listeners must cultivate the silence within which the voice of another can resound. But that protected place that another can enter is—both physically and psychically—a space in the *listener's* world, a space of hospitality. Or as I would suggest, a garden. Again, to conceive Earth as a garden forces us to recognize our responsibility for decision and action, but it does not predetermine our path. Some spaces can, indeed must, be cultivated intensively if we are to preserve other spaces as relatively untouched (high density urban areas, e.g., are the best cure for habitat-wasting suburban sprawl). We ought and hopefully will make such decisions wisely. But we're more likely to do so, I'd suggest, by remembering our aim: that the garden flourish as a whole.

Moreover to conceive the world as a garden invites us to see ourselves as stewards, but does not entail the presumption of ownership either individually or collectively. We have, of course, many models for this: museum curators and librarians care for collections that are not their own; the Queen of Great Britain is the

[19] For a thought-provoking introduction to many of the complexities involved, see Cooper (2006), especially Chapters 4–7.

steward of the symbols of her office, but they are not her own to sell on eBay; and under Levitical law, the ancient Israelites could buy and sell land—but they did so only temporarily, for the promised land was the Lord's and as the inheritance of the whole people it could and would be restored every 50 years during the year of Jubilee. Indeed many of us have a direct, personal, and significant duty to care for what we do not own: our children, whom we may serve at great cost though we know that as they grow up they may come to serve their own, very different ends. By calling a child "mine", I recognize my special obligation to care for her; I do not claim ownership. Similarly in treating the earth as a garden we need make no claim to own it.[20] Acknowledging the earth as our garden means nurturing it in trust in the light of the one fate we know we share: eventually, we too must pass it on.

A second objection might read: 'are you not imposing the constructivist and garden metaphors imperialistically?' This objection raises a legitimate suspicion, but to address it we must clear away some non-issues. First of all, to have and recommend one view is not a problem: consistency demands holding no more than one view at a time. The question is whether a view is well-justified and whether better alternatives are available; and the best way to discover that is to hold our view open to correction by subsequent insights. Yet the primary virtue of the constructivist approach I'm recommending is the fallibilism that prevents us from latching too tightly to any one metaphor. Moreover I think, with the pragmatists, that fallibilism can be fallibilistically justified. As for conceiving the earth as a garden in particular: I have argued that this metaphor is inviting because it highlights both the critical role we do play and the fact that we play this role in a wider, resisting and responsive context. But I'm happy to welcome other, better metaphors should this one go sour or should another, better one appear.

A third objection asks: 'Isn't this view profoundly idealistic?' In one sense, this account is undeniably idealistic, for although we can suspect the limits of our current perceptions, we cannot determinately articulate, much less modify and correct them, without the linguistically enabled capacity to recognize the gap between our current expectations and our actual experiences. Yet it does not idealistically volatize the independent reality of the world. Gadamer's hermeneutics not only admits but highlights the way the world can and does resist our characterizations, thereby challenging us to produce new and better ones: that's why disappointed expectations offer the preeminent means by which we learn. The primary object of language is not language itself but our material and social world; far from hiding it, language first brings it into the light—and more importantly still, language alone enables us to see the tension between the world as we've conceived it and the world as it now shows itself. The reality and resistance of material and social relations come into sight—and only come into sight—through language.

[20] Surely some will argue that we can and should; settling that claim would take further argument. My point is simply that ownership is not entailed by the image of a garden.

4.8 Conclusion

Having finished a long and somewhat circuitous argument, it might be well to review our path. In the first few sections, I introduced the current debate about wilderness in North America before arguing that after the linguistic turn, we had to admit the ways that we constructed wilderness. To be sure, that invited dangers, and ones more significant than some prominent critics of the wilderness idea have conceded. I argued, however, that a generically constructivist and specifically hermeneutic account of wilderness has consequences much more salutary than have been noticed: it forces us to admit, seek, own and ideally overcome the limits of our views. Finally I closed with a few reasons for considering the Earth as a garden. There are dangers to this approach, and the fact that it leaves many further practical questions undecided means that they could be decided wrongly. But I do think that both practical and theoretical reasons make this metaphor instructive. The problem with the biblical view of the Earth as a garden, in my view, was not our use of that guiding metaphor, but rather our tendency so flagrantly to ignore it.

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Chapter 5
Wilderness Recognized: Environments Free from Human Control

Robert Scotney

5.1 Introduction

In this chapter, I argue for an alternative conception of wilderness to the so-called "received wilderness idea". I begin by agreeing with Callicott and others that the received wilderness idea fails to reflect the reality of natural environments, and is even harmful in some of its applications. I next argue that the criticisms raised against the received wilderness idea do not necessarily have to lead to the conclusion that the concept of wilderness should be abandoned altogether. I then present an alternative concept for the received wilderness idea, in which wilderness is defined as an environment's freedom from human activity as its dominant shaping factor. I finally show how this alternative concept avoids the problems of the received wilderness idea.

5.2 The Received Wilderness Idea

In recent times the very idea of wilderness has come under intense criticism. This occurs at a time when a significant political struggle to protect environments identified as wilderness continues across the globe. The main claims against the idea of wilderness, as made by J. Baird Callicott, William Cronon, J. B. Jackson, Ramachandra Guha, David Harmon and Sahotra Sarkar amongst others, are the following:

(A) That the idea of wilderness can be destructive to human populations and even result in acts of genocide;
(B) That in many cases, the idea of wilderness can even be harmful to biodiversity preservation;

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(C) That the idea of wilderness does not accurately represent actual landscapes or their history and is ultimately nothing but a cultural construction, a myth; and
(D) That even if other, less destructive notions of wilderness exist, the concept should be abandoned because these more benign notions are too easily confused with the more destructive concept, which is the dominant one that holds sway in public institutions and decision-making, and people's emotions.[1]

Callicott and Michael Nelson refer to the dominant concept of wilderness as "the received wilderness idea". The basis of this idea is that to be a wilderness, an environment must be free from human habitation and significant human modification. This more or less resembles what is now found, for example, as a common usage listed in the Oxford English Dictionary definition of wilderness. In the (US) Wilderness Act of 1964, this definition became legally binding, and has become influential across the globe through this precedent. Unfortunately, there is plenty of evidence for claims A, B, and C being true of this "received wilderness idea".

5.2.1 Evidence for Claim (A)

Evidence for claim (A), *that the idea of wilderness can be destructive for human populations*, is presented in numerous studies which have found destructive impacts on human populations to be the result of the designation of areas as wilderness and their protection as national parks on that basis, as summarized by Guha (1998) and Harmon (1998). An example is Colin Turnbull's 1972 study of the impact of the formation of the Kidepo National Park in Uganda on the indigenous Ik population. The Ik were removed from their lands and suffered such a degree of cultural disintegration as a result that they became what has been described as "a travesty of humanity". The many examples given by these writers of people being removed from their lands, sometimes by force, in the name of wilderness suffice as evidence for the destructive impact the idea has had and might continue to have in practice. It is not that this idea is necessarily, intrinsically destructive to human populations. Rather, too often the idea of pristine, untouched nature is given such a high value that the human inhabitants of real environments designated as representing this ideal, despite already contradicting this definition by their very presence, become an inconvenience to be removed in the name of political and commercial expediency.

5.2.2 Evidence for Claim (B)

Evidence for claim (B), *that the wilderness idea can be destructive to biodiversity*, is to be found in the work of Sarkar (2008), who cites Vijayan's 1987 study of the Keoladeo National Park in Rajasthan, India. When this area became a National Park

[1] Collected in Callicott and Nelson (1998), and the follow-up volume, Nelson and Callicott (2008).

to protect the extraordinary diversity of its birdlife, local farmers were banned from allowing their cattle to graze on its grasses. As a result, the grasses swamped the wetland, making it uninteresting to birds, which vanished from the area. In this and a number of other cases, for example in Costa Rica and the United States, wilderness designation has been shown to have a detrimental effect on biodiversity preservation for a number of different reasons. A significant factor seems to be, once again, as we see in the example above, the practice of ignoring the real human-environment relationship present, specifically in these cases the possible contribution of human habitation and activity to the preservation of biodiversity. As Sarkar argues, biodiversity and wilderness preservation are often equated when they are in fact quite distinct and divergent practices.

A common belief is that wilderness environments are the environments with the greatest biodiversity on the planet, and so should be protected for that reason. However, according to R. A. Mittermeier et al., most of the world's wilderness areas, which together cover 44 % of the planet's land, are *not* high in biodiversity, and the areas with the highest and most endangered biodiversity, referred to as biodiversity "hotspots", do not exist in wilderness regions at all. They define wilderness as regions with less than five people per km^2 that have retained at least 70 % of their "historical habitat extent (500 years ago)" (Mittermeier et al. 2003, 10309). So even where wilderness preservation does not *harm* biodiversity, by such definitions, it cannot do much to preserve it, either. According to Sarkar (2008, 243), in some cases, designation of wilderness in places that contain significant biodiversity outside the designated areas, such as Costa Rica, have given the human population free reign to destroy the regions of greatest biodiversity. This has caused a catastrophic loss to that diversity just as people celebrate that it and the wilderness, which they fail to distinguish between, have been protected (25 % of Costa Rica is national parks and reserves).

5.2.3 Evidence for Claim (C)

Evidence for claim (C), *that the idea of wilderness does not accurately represent actual landscapes or their history and is ultimately a cultural construction, a myth*, is found in studies showing the extraordinary extent of human modification and habitation of so-called wilderness areas, particularly of indigenous impact on the American and Australian continents, for example those of Pyne (1997) and Denevan (1998). Walking Tasmania's Cradle-Mountain to Lake St Clair Overland Track, one encounters a diversity of environments, including extensive button grass plains shifting in and out of savannah-like patches between mountains with their alpine vegetation, narrow river valleys of dense rainforest, lakes, streams and swamps. This diversity is partly a result of thousands of years of aboriginal land practices of burning, hunting, and habitation, nothing like the pristine idea of nature untouched by human devices. Yet the received wilderness idea seems to be so frequently misapplied to environments such as these (like those of Amazonia and New Guinea, for example)

and the possibility of finding environments properly fitting this description so limited, that it seems that at least in practice, the received wilderness idea is blind to the realities of human and natural history. When this is ignored and the pristine concept of wilderness is applied to human inhabited regions, the kinds of disasters addressed by claims A and B above have often been the result.

According to environmental historian William Cronon (1996), this received idea of Wilderness developed from a fusion of European romanticism with the rise of the culturally and racially elitist myth of the rugged individual forging his own and simultaneously America's (national) identity and destiny from the conquest of the wild frontier. As such, he argues, until this time wilderness was only thought of in negative terms, as wasteland or desert, and was certainly not something to be highly valued or protected. Kevin Deluca and Anne Demo (2001) also argue that wilderness is nothing but an elitist nineteenth century cultural construction of predominantly white, Anglo-Saxon middle and upper class males, and this line of argument stretches back to the work of nineteenth century historian Frederick Jackson Turner (1894), whose work Cronon cites.

According to J. B. Jackson (1994), the concept of wilderness arose from historical events like the Roman conquest of Europe, signifying land on the margins of and between settlements shaped by human beings in conflict and negotiation that played the role of marking out the boundaries of dominion. These became aristocratic hunting grounds. Jackson argues that this idea eventually transformed into that of the recreational domains of American elitist culture, and came to represent an idealization of landscape that denied the crucial role human beings play in giving it and more humanized landscapes shape and meaning. In Jackson's view these wilderness areas are ultimately less important than and a mere function of the human made landscapes being devalued in this idea of wild and pure non-human nature. Recently in a Tasmanian context Jeff Malpas (2011) has used Jackson's arguments to argue against the idealized aesthetic of non-human wilderness landscapes in favour of an understanding of place as a primary ontological condition already entailing a shaping, being shaped by and dwelling within landscape.

Cronon and others enquire into the cultural and psychological origins of the idea of wilderness. However their interpretations of the received wilderness idea by no means equate with all experiences of or beliefs in the idea of pristine, untouched wilderness. There are as many potential beliefs about and experiences of the environments thought to resemble this as there are individuals who might have them, multiplied by the different possible perspectives any one individual might experience it from. Nor are these necessarily restricted to the cultural baggage of a particular culture such as the American elite, even if they are influenced by it. Yet whatever its origin, it seems that strictly speaking, the received wilderness idea does not really correspond with any actual environments existing on the planet today. This is due to the long history of human habitation and modification belonging to all of the world's land masses save Antarctica. Furthermore, natural environments have been impacted and modified not only by direct human incursions, but also by pollution like acid rain and contamination of water tables and food chains, not to mention the effects of human caused climate change. Pristine, pure, untouched nature in

some special primordial form free from all human history and influence can nowhere be found. There is no such thing as wilderness when it is conceived in these terms. It is a myth.

5.2.4 Rejection of Claim (D)

It seems that claims A, B, and C are significantly true of the received wilderness idea. I myself agree with Callicott and others that this particular concept of wilderness needs to be abandoned altogether, for these reasons. I do not agree, however, with claim D, that the received wilderness idea is so heavily entrenched in tradition and the hearts and minds of its proponents that alternative notions of wilderness will always be confused with them and never be able to be properly distinguished from or prevail over them. There are a number of other concepts of wilderness already in use by scientists and non-scientists alike, some with a much greater historical precedent than that envisioned by the likes of Cronon, to which charges A, B, and C simply do not apply. If, and only if these ideas are sufficiently deepened, adjusted, extended, and clarified can they supersede the received wilderness idea and stand to disprove claim D. If there really is such a thing called wilderness, we need to find out how to identify it, and what its value might be to us. I argue that the most effective and significant way of doing this is to develop a coherent definition of wilderness that is immediately capable of demonstrating its identifying qualities. I attempt to draw from meanings and values that have already been assigned to the idea of wilderness throughout its history which remain relevant to us today (beyond the *so-called* received wilderness idea), whilst clarifying and extending them. That is what the following section will attempt. What also will be shown is that these ideas already have both sufficient credibility in the worlds of environmental science and policy and are in fact potentially more compatible with many of the experiences of those who value wilderness most highly and seek to protect it than the received wilderness idea. Not only can such a conception of wilderness replace the received idea, it needs to.

5.3 An Alternative Conception of Wilderness

To pave the way for a sensible alternative for the received wilderness idea, I will first clarify the conceptual ambiguities of wilderness definitions that are currently under discussion, in particular the definitions of wilderness as freedom from habitat loss, and as freedom from disturbance of modern industrial society. I will next present my alternative definition of wilderness as an environment's freedom from human activity as its dominant shaping factor, and finally argue that in this definition wilderness does not stand in opposition to civilization.

5.3.1 Conceptual Ambiguities

"Because the concept of wilderness has been primarily a cultural one, the scientific foundation for wilderness is still being established," argues Julie McGuiness (1999) in her article on the webpage for The (Australian) Wilderness Society entitled, "What is Wilderness?" James E. Watson et al. (2009) define wilderness as "large areas that have experienced minimal habitat loss". This is similar to the definition of Mittermeier et al. (2003) of wilderness as large regions with less than five people per km^2 that have retained at least 70 % of their "historical habitat extent (500 years ago)". But can freedom from habitat loss alone really be an indicator of whether an environment ought to be thought of as wilderness or not? What if habitat loss has resulted not from human activity and presence, but simply from natural forces? Is a desert that was once a savannah not a wilderness because of this? This seems not to be what is meant here, as implicit in most concepts of wilderness is the idea of a freedom from habitat losses caused not by natural forces, but by human beings.

Brendan G. Mackey et al. (1999) distinguish between wilderness *quality* and wilderness *areas*. They define wilderness quality as the extent to which any specified area is remote from and undisturbed by the impacts of modern industrial civilization. Wilderness areas, on the other hand, are areas where wilderness value is recognized and valued by society but which are defined by arbitrary thresholds of remoteness, naturalness and total area. This is a somewhat confusing double definition, as it implies that wilderness areas are merely cultural constructions, and at the same time that there are some geographic areas that actually do have a more or less empirically measurable wilderness quality. It appears the authors needed to make this distinction because publically wilderness seems to frequently be identified in such arbitrary ways. It is this kind of disparity between the possible reality of wilderness and false ideas about wilderness as it plays out in policy and cultural practice that my argument seeks to redress. The "received" wilderness idea, as has already been amply shown, can be extremely destructive, whilst understanding the possible reality of wilderness in unequivocally public terms of policy and cultural practice might just have great benefits yet to be recognized, which I will attempt to sketch out. First, however, these alternative conceptions of wilderness need to be further examined and clarified.

Mackey et al. (1999) work with definitions and measures of wilderness that have actually become part of Australian Government policy. It is therefore important that conceptual ambiguities as to exactly what a wilderness area is be ironed out, to avoid the creation of policies and practices that are either dangerously misguided or that use the conceptual pliability inherent in such ambiguities for the ends of mere political and economic expediency, at the expense of human beings and the natural environment. At the present time, even though scientists have been developing the working definitions of wilderness currently under discussion and these definitions have become part of Australian Government policy, there is still much disagreement as to what wilderness actually is. Respected scientists like Tim Flannery, until recently in charge of the Government's response to climate change, are still writing

influential and popular articles arguing that there is no such thing as wilderness, because they are under the impression that the so-called received idea of wilderness is the only idea of wilderness there is.

One of the principle measures Australian Government scientists (following the work of Lesslie et al.) use to empirically identify wilderness areas in contrast to the arbitrary boundaries that may be constructed by popular ideas of wilderness is that of "biophysical naturalness", which is defined as "the degree to which the natural environment is free from biophysical disturbance caused by the influence of modern technological society" (Lesslie et al. 2013). This echoes the definition of naturalness in the US 1964 Wilderness Act, which means "untrammelled," that is, "not subject to human controls and manipulations that hamper the free play of natural forces."

So far we have definitions of wilderness in terms of freedom from habitat loss, and in terms of freedom from the human disturbance of modern technological societies. Yet as we have seen, habitat loss may be caused by natural forces, yet the desert which was once a forest we could still call a wilderness in terms of its lack of human impact. Freedom from habitat loss ought to only become a measure of wilderness when that loss is a direct result of human activity. What makes a wilderness wild is the freedom of its species from human domestication and cultivation, amongst other things, according to perhaps the most common meaning of the world "wild".

The problem with the definition of wilderness as land free from the disturbances of modern industrial society is that it accidentally implies that pre-modern or pre-industrial societies were wildernesses. However if we think of the societies of Ancient Egypt or medieval Britain we can hardly think of them as wilderness civilizations, and it seems their very presence in fact allowed for the first time a distinction between wilderness and civilization *as opposites* (though as we shall see, they need not necessarily be so). We find the first written uses of the term wilderness in the English language in the middle ages. But how do these earlier human habitations and their activities signify a loss of wilderness, and what does this have in common with the impact of modern industrial societies upon it? What is it about these human habitations and activities that also sets them apart from wilderness, and so defines it in opposition to them? As already argued, freedom from habitat loss needs to be understood strictly in the terms where such habitat loss might be caused by human activity for a definition of wilderness along these lines to make sense. What kind of human activity and habitation that may cause significant habitat loss are wilderness environments free from?

5.3.2 Freedom from Human Control

Forest scientist Gregory H. Aplet and colleagues at the American Wilderness Society conducted a survey of over a century of wilderness literature, and concluded that:

> 'wildness' is the essence of wilderness, and it is composed of two essential qualities—naturalness and freedom from human control. Naturalness refers to the degree to which land functions without the influence of people. (Aplet et al. 2005, 92)

In this definition, "naturalness" is simply the degree to which land is independent of human intervention to sustain its ecosystems, and this independence together with freedom from human control constitutes wildness. This is closer to a definition of wilderness that might have a wide range of applicability to natural environments in unequivocally empirical terms. The crucial question is what do we mean by human control?

How can human beings control an environment? The answer is by transforming it to such a degree that its main physical qualities are actually a direct and continuing result of human activity. Control in this sense implies a level of biophysical disturbance that not only *affects* an environment, but actually dominates it. It is the kind of human environmental control that has sufficient transformative power over these environments to become their dominant shaping feature. It requires a conscious human ordering of what is present. Human beings consciously order the state of urban environments by first building and then maintaining roads. They consciously construct and maintain cars to drive upon these roads. All of this is done in such a way that allows such driving to continue largely uninterrupted. They further order such environments by planning, building, maintaining and inhabiting them using materials extracted from non-human environments. They order one another in these spaces and their extractive and transformative disruptions of the wild with employment, trade, education, recreation, welfare, laws, police, courts, prisons, politics and wars. Animals are domesticated and exploited, and where they interfere with this ordering, exterminated. Land is cleared of vegetation and plants are cultivated only for human use. What is wild is that which is free from this kind of human control.

Having identified the kind of human activity and presence that stops an environment from being wild, I now define wilderness as the kind of environment that is free from human control in the sense that it does not have human activity as its dominant shaping feature.

This definition owes a lot to that of Aplet et al. (2005), and is in accord with the other alternative definitions discussed so far, but is just a little clearer—and radically different from the received wilderness idea, as will now be shown. But first it should be clarified what is intended by this form of definition.

In much contemporary philosophical thought, the traditional philosophical goal of finding correct definitions that get to the essence of a concept has fallen out of favour. There is often recognition that the meaning and significance of a conceptual definition is not so much a question of its ultimate truth, but of how its truth or expressive power functions in the pragmatics of usage and interpretation. As such, my definition is intended as a pragmatic one that can most beneficially and intelligibly apply to the widest number of cases and experiences, with the clearest possible empirical measures.

The question of wilderness is conceived here as the question of an environment's freedom from human control of the majority of its physical features and processes. Such a definition raises questions such as whether a previously human dominated environment can become a wilderness again (I argue they can) and whether wilderness should only include living systems or also environments like the moon or the planet Mars (I argue the latter), whether wilderness can only be of a certain scale

(I argue it needn't be) and whether the world's biodiversity hotspots can be thought of as wilderness after all (I argue they can). These questions I deal with elsewhere are somewhat beyond the scope of the current argument (Scotney 2013). But with this question of freedom from control more questions arise which must presently be addressed: how much human habitation and modification of an environment is *too* much? Are there degrees to which human habitation and modification of environments do *not* constitute a dominant shaping human control of these environments? If this is the case, then human beings *can* live in *and* modify wilderness environments—in stark contrast to the received wilderness idea. How might this different idea of wilderness and human habitation and modification make sense to us?

5.3.3 Wilderness Civilizations

Already, in the Australian policy oriented definitions of wilderness grounded in the ecological science of Watson et al. (2009) and others, we find the following qualification: "many wilderness areas may have had a long history of human occupation, as is the case in Australia, and the term does not preclude (or ignore) human presence" (Lesslie et al. 2013). Part of the reason for Mackey et al. (1999) defining wilderness *quality* in terms of the disturbance of modern industrial society in particular, and differentiating it from (perhaps we might read *dominant* in a negative colonial sense) cultural ideas of wilderness *areas* seems to become clear in the following statement: "*Wilderness quality* can thus be defined as a function of levels of disturbance associated with modern technological society and, as such, does not deny the reality of Indigenous Australia". It has already been argued that there are many more historical forms of human habitation and activity that have had the effect of annihilating and contrasting with wilderness environments than anything we might call modern industrial society. What is encouraging in this view of wilderness, however, is that it allows for at least the level of human activity and modification of the environment (however drastic it may at times have been in forms such as fire regimes and overhunting to the point of extinction) that was present in Indigenous Australia at the time of the British colonial invasion. Such a definition might allow radical and even destructive transformations of the environment so long as human activities do not remain its dominant shaping feature. At the same time, it reveals ways of interacting with environments free from human processes that become their dominant shaping feature.

In recognizing Australia's indigenous history of human environmental relations, is effectively the recognition that the degree of habitation and modification of the environment in terms of this history (at least to this fateful point of cultural collision) has not been one where the level of human control over the environment has become its dominant shaping feature. The landscapes of Aboriginal Australia, free from colonial or modern incursions, are or were wild landscapes in that they were significantly free from human control, shaped only in part by human beings, and by

no means entirely dependent on them for their distinctive forms or features. There is no doubt that indigenous Australians played a key role in the formative processes of these wild environments, but it was not one of total domination so much as of a self-aware custodial participation, as contemporary inheritors and proponents of Aboriginal cultural traditions such as Jim Everett (1999) are keen to remind us.

Civilization does not *just* mean large scale built environments and the kinds of technologies that have led to modern industrial society and does not necessarily have to stand in opposition to wilderness. Is it wrong to speak of Aboriginal civilization, or of wilderness civilizations? The original Middle French meaning of the word "civilization" is simply that which is civilized, made civil, where civil means relations in the legal sense between ordinary members of a society, and to civilize means to further develop those social relationships, to progress and advance them. The contemporary meaning remains essentially the same. But there are more ways to progress and advance the social relations within a society than the great achievements of the world's dominant civilizations, for whilst these global dominators know how to keep growing, they still do not know how to properly sustain themselves and the environments they depend on for survival. Contemporary Australian practices of wilderness identification and respect and recognition for indigenous history and culture show ways in which human beings can harmoniously inhabit and interact with natural environments without destroying their wildness or the natural resource base they rely on. These are practices woven into the very fabric and history of these societies, despite significant and ongoing cultural losses and geographic displacements. Their history and contemporary manifestations betray just as many serious problems as any other forms of social organisation, and should not be romanticised. However, they still might teach the world valuable things about how we can relate to our environments and each other that other kinds of societies might not have knowledge of or expertise with. Not all the world, however, has quite caught up with this practice of recognizing and respecting the rights and roles of indigenous cultures in wild environments, despite some promising signs. Furthermore, in Australia such respect and recognition is still tenuous and disputed, often more talk and confused action resulting rather than real progress.

The International Union for the Conservation of Nature (IUCN) defines wilderness as "large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation". It identifies the primary objective of wilderness conservation as being to protect the long term ecological integrity of these areas, whilst at the same time identifying "Other Objectives" which include enabling indigenous communities to "maintain their traditional wilderness-based lifestyle and customs" at low population densities (Dudley 2008, 14). What is problematic here is the equivocation between speaking of traditional wilderness-based populations and lifestyles as part of wilderness conservation, on the one hand, and speaking of wilderness as being without permanent or significant human habitation on the other. This becomes still more problematic when the status of indigenous wilderness populations becomes part of "Other" objectives separate from the Primary objective of wilderness conservation, which implies that they are secondary—which takes us back to the supposed absence of

significant human populations. The implication is that indigenous populations are considered of secondary importance and are in fact insignificant. Whilst we may say that significance is meant to refer merely to significant size in the relative terms of global population density, and that permanent human habitation means permanent *built* human habitation, this is by no means clear. Definitions containing such deep ambiguities risk manipulation and appropriation for the ends of political and commercial expediency. Until it is properly acknowledged on a global level that wilderness can actually include *significant* and *permanent* human habitation (whether semi-nomadic or not), indigenous populations in places that may also be designated wilderness risk being judged either as insignificant or disruptive to those environments. Yet these are civilizations in their own right that are not being adequately acknowledged as such. The same kinds of human disasters caused by misapplications of the received wilderness idea discussed earlier could result. Furthermore, other areas where the indigenous or other human habitation is significant and transformative of their natural features without being the dominant shaping factor of them risk being dismissed as of less than wilderness value. Defining wilderness as environments free from human control as their dominant shaping factor can allow us recognize and respect the rights and place of indigenous and other human populations amidst wild environments, and may also help protect these environments precisely by allowing for such forms of human habitation and custodianship.

5.4 How the Alternative Conception Avoids the Problems of the Received Idea

To answer the question how the idea of wilderness as environments free from human control as their dominant shaping feature does stand up to the criticisms so effectively raised against the received wilderness idea I will again go over the four claims discussed in Sect. 5.2.

5.4.1 Claim (A)

Claim (A) was that *the idea of wilderness can be destructive to human populations and even result in genocide*. This occurs when the idea that wilderness must be devoid of human habitation and modification is perversely enforced on inhabited areas. In such cases, on the one hand inhabitants are thought significant enough to make it difficult to call the environment wild in these terms and therefore put it to the kinds of cultural uses required. On the other hand, they are not deemed significant enough for their loss to be noticed or questioned. However, when we define wilderness in terms of freedom from human control as the dominant shaping factor of the environments in question, wilderness-based cultures can be recognized and respected, rather than ignored and forcibly removed from their homelands. Certainly, if wilderness is still to be protected, restraints must be put on population and infrastructural

development within these cultures, and questions of rights of habitation and land use will still come into play. What is crucial, however, is that these stakeholders living in the midst of wilderness are not ignored or harmed, but respected and negotiated with. When indigenous habitation and land use of wilderness areas is recognized and the limits and meaning of wilderness properly identified, it seems far less likely that the kinds of forced removals and conflicts that have resulted in the past could continue to occur. Claim A no longer holds for such definitions of wilderness when paired with such compatible recognitions, and only applies to the received wilderness idea.

5.4.2 Claim (B)

Claim (B) was *that in many cases the idea of wilderness can even be harmful to biodiversity preservation*, like in Sarkar's example of Vijayan's study of the Keoladeo wetlands in Rajasthan, where the removal of humans and their livestock meant a major disappearance of birdlife due to the grasses no longer being grazed and so choking the wetland for the birds. The conflation of wilderness and biodiversity preservation is seen to be an error when wilderness is measured in the terms proposed by Mittermeier et al. (2003), where none of the world's large scale wilderness areas contain the greatest areas of biological diversity or most critically endangered species on the planet. Even if all the world's wilderness areas as measured by Mittermeier et al. (land of significant size with less than 5 people per km^2 and retaining 70 % of the habitat extent it had 500 years ago, a measure which I argue is unnecessarily exclusive beyond the limits of such a study) were protected, the world's greatest and most endangered areas of biodiversity could still be destroyed. This is exactly what has happened, as we saw, in Costa Rica, where wilderness protection gave developers licence to destroy the country's most biologically diverse areas. Even if we think of the biodiversity hotspots as smaller scale wilderness areas on the fringes of human settlements, the majority of the world's wilderness remains comparatively lower in biodiversity (and not critically endangered), and so should not be confused with them.

There is no reason why, if we define wilderness the way I am suggesting, the idea of wilderness or the practices of wilderness conservation should be detrimental to biodiversity, so long as they are not conflated with the idea of biodiversity conservation or prioritized over it. Only the received wilderness idea, with its impossible ideal of pristine, untouched landscapes free from human habitation and modification presented as the ultimate goal of *all* environmental conservation, has been harmful to biodiversity and human populations when put into practice.

5.4.3 Claim (C)

Claim (C), *that the idea of wilderness does not accurately represent actual landscapes or their history and is ultimately nothing but a myth, a cultural construction*, is based on three main ideas. The first is that the idea of wilderness denies the long

indigenous history of human habitation and modification of the environments generally identified as wilderness, like those of the American West. Yet this argument only applies to the "received" idea that wilderness must be free from significant human habitation and modification, not to the idea that wilderness signifies environments *relatively* free from human control that can include the significant but not dominant human habitation and modification associated with certain kinds of indigenous societies. For the lands usually identified as wilderness have histories of and have been (partly and significantly but not wholly) shaped by such habitations and activities. These histories are *not* denied when wilderness is defined in this way, as is already acknowledged in Australia and to some extent, internationally.

The second idea that informs claim C is that the contemporary idea of wilderness as the kind of environment worthy of preservation is a culturally specific one, born in nineteenth century America, under the influence of European romanticism. Cronon (1996) and others argue that before the nineteenth century, wilderness was thought of simply as undesirable, dangerous, barren wastelands or desert. This idea however simply does not stand up to the historical evidence. Roderick Nash (1967, 2) identifies the first instance of the term wilderness in English in Layamon's *Brut*, a thirteenth century Middle English epic, also known as the *Chronicle of Britain. Brut* is a historiography that identifies the founder of Britain as the mythical Brutus of Troy. In this text, the terms 'wilderness' and 'wild' are featured frequently throughout the narrative. Wilderness is frequently paired with forest, in the frequently repeated phrase form, "the wood, the wilderness," and sometimes also with "heath and fern." Throughout the poem, the wilderness is both a place of danger and adventure and one of refuge where heroic forces can gather strength and even build a castle. Furthermore, wilderness is included as a part of the land that a king rules over, rather than signifying the antithesis of this dominion. In fact, in *Brut* we find individual human *wildness* described in both negative and positive terms: as a fatal lack of self-restraint on the one hand, and as that ferocious power capable of winning the battles, overthrowing the dominion of and attempted domination by others, on the other.

Another major source of Western historical ideas about wilderness is the Bible, where in the New Testament it comes to represent abandoned places that do not always equate with deserts or wastelands. According to Janet Poindexter Sholty (1997), from the Biblical wilderness "the wilderness as a landscape of personal crisis becomes in the Middle Ages a significant part of the representation of interior experience in painting and literature". Wilderness became a symbol of spiritual transformation, not just in the English language, but throughout Europe, from *Beowulf* to Dante's *Divine Comedy*, through Chaucer, *Sir Gawain and the Green Night*, the Corpus Christi cycle plays, the Robin Hood ballads, and Thomas Mallory's *Le Morte D'Arthur*. In these stories, argues Sholty, wilderness landscapes "reflect the passages from one stage of life to the next and from life through death to eternity".

From the very beginnings of its history, the idea of wilderness has represented both danger and refuge; a range of landscapes between forest and desert, the possibility of winning a great victory and forging a civilization in a contested land, and a

place of spiritual turmoil and transformation representing life, death and eternity. Effectively, then, the *romance* and reality of wilderness, together with its symbolism as a place of essential spiritual transformation have played a central role throughout the history of European civilization. It does not *come* from the romantics, or from aristocratic hunting traditions or the American frontier, but is part of the very fabric of Western Civilization. Nor in these ideas must wilderness ever be totally uninhabited or unmodified by human beings. Even Thoreau saw wilderness as something civilization ought to be forged from, to be celebrated even as it is turned into farmland. John Muir had no problem talking of venturing into the wilderness of Alaska and visiting Indian settlements there. If anything, the so-called received wilderness idea is not *received* at all, or received only from the wording of the 1964 Wilderness Act and the ideals of some American environmental activists and thinkers from the 1960s and 1970s. The idea that wilderness is simply land free from a human control as its dominant shaping factor that humans may or may not dwell within and alter within these limits is much older and more established in historical usage. It is this kind of environment that has conjured within human beings the ideas of danger, adventure, refuge and inner transformation we find in many of the great literary, artistic and spiritual works of Western culture. Psychologically it has often symbolized the potential for individual human beings to gain freedom by overcoming the dominating control of other human beings and the limitations of even one's own humanity, in both positive and negative terms.

The third idea informing claim C is J. B. Jackson's argument, taken up by Jeff Malpas, that the idea of wilderness and the landscapes designated in its name have actually become human constructions ignoring the most significant human-landscape relationships that shape our lives and the spaces we live in. Jackson argues they have falsely come to represent an independent landscape of pure nature that has a higher value for humans than any others. Once again, however, this critique only really applies to the received wilderness idea of a pure, primordial, pristine nature totally untouched by human beings, a raw state of wild nature that almost seems to imply a metaphysical essence of nature's presence within it that humanized landscapes lack, and to the conservation practices it informs. The idea of environments out of human control as the dominant shaping factor is not a hard one to find empirical correspondences with in actual landscapes. One might argue that since these environments have part of their boundaries and extent shaped by human beings, they are controlled by human beings, but they are only controlled in the sense of being limited at the perimeter, not dominantly shaped by human beings *within* their area. To recognize them is not to deny the value of the activities and situations they are defined in contrast to any more than it is to deny those which can belong to them.

Wilderness environments are not cultural constructions, they are physical realities. With this idea arises the possibility of meaningful human cultures which inhabit and transform these environments at levels that do not destroy their wildness. At the same time, the value we might find in them is not a denial of the value of human dominated landscapes, but a recognition of the importance of actively working with and protecting the kinds of natural environments upon which these depend on

to survive. For if there is one consistent value that wilderness gives us, it is the ability of self-sustaining ecosystems to provide a global life-support function for our survival which our own technologies and infrastructure are not yet capable of reproducing and sustaining so effortlessly or comprehensively.

U.S. Forest scientist H. Ken Cordell and colleagues argue that "Native life support is the ecological value of wilderness". They argue that wilderness provides this life support through the health of its ecosystems. They define ecosystem health as "the set of natural conditions needing to exist to support native life forms". In a comparative analysis with other landforms, they conclude Wilderness areas are more natural—that is, free from human influence – and at the same time have the highest levels of ecological health" and point out the importance of this for the future of life on this planet. Wilderness is no myth, but a vital reality on which we depend.

5.4.4 Claim (D)

Thus far, claims A, B, and C have been shown to apply to the received wilderness idea, but not to the idea of wilderness as environments out of human control as their dominant shaping factor. It is time now to properly address claim (D): *even if other, less destructive notions of wilderness exist, the concept should be abandoned because these more benign notions are too easily confused with the more destructive concept, which is the dominant one that holds sway in public institutions, decision-making, and people's emotions*. The received wilderness idea is certainly influential, provoking a great deal of debate amongst environmental thinkers and policy makers for the past 40 years, including the critiques this essay addresses. It is enshrined in law in the 1964 Wilderness Act of the United States, and is still popular in dictionary definitions and amongst environmental activists and philosophers like Holmes Rolston III. Yet as we have seen, this idea is nowhere nearly as entrenched in American or global tradition as Callicott, who calls it "that Old-Time wilderness religion". The wilderness romanticism of the past, celebrating it as a place of perilous adventure, refuge and spiritual transformation, and a place to get back to the wildness from which great civilizations were forged, by no means insists on an absence of human habitation or transformation of it. What is it then, in more recent times, that has made this idea so much more compelling? Could it be that thing wilderness is often measured against, the impact of modern industrial society—not just upon the landscape, but upon human beings? The impact in this case might just be the effect of making people *forget* that on this planet, wilderness and civilization are part of the same biosphere system, and depend on each other for survival.

The idea that wild environments or environmental factors free from human control do not penetrate, shape or interact with human experience or landscapes, and cannot themselves be modified and to some extent shaped by these things without losing their wildness is false. Our very bodies have emerged from them and continue to depend for their very make-up on the inputs of these wild ecosystems

combined with those of human cultivation and domestication, which also depend on such non-human controlled physical processes. We do not control our heartbeats or make plants grow, we simply do our best to move such processes towards goals we cannot help but have. However, the contrast between the experience of modern urban life and that of a wild environment can be so great that it seems that the degree non-human created phenomena are banished from human environments defines their humanity as utterly independent from and antithetical to them.

5.5 Conclusion

When dominating and self-deluding practices become the exclusive way humanity is defined, then the only way it seems environments free from such domination and solipsistic reflection can be defined is to say that there can be no part of this humanity within them. Yet these very behaviours have not only emerged, in evolutionary terms, directly from such wild environments, but continue to depend on them. Despite illusions to the contrary, these behaviours remain to this day wild, *out* of our control in their very capacity to dominate and humanize landscapes to such a degree that they now threaten global wellbeing and survival. Yet these are not the only behaviours that have evolved from the wild systems upon which we depend, for as we have seen, for thousands of years indigenous communities have developed ways of living in wild environments that adapt and adapt to rather than destroy their wildness. Those of us living in the cultures of domination together consciously control our environments, but have not yet learnt to control *how, when* or *where* we consciously control them, or to recognize either what we do not control, or what it might benefit us *not* to control. Our controlling itself is still significantly *out* of our control, that is, wild, in the sense that we have insufficient collective *self*-control over our behaviours of environmental domination. Individuals and small groups who have enough self-discipline, inherited privilege and lust for power to seize control of the means of such domination, but insufficient awareness or self-control to stop their activities from destroying the world's most vulnerable environments (and people), are *allowed* to set the rules of political economy as though they were natural or scientific facts. When we have no self-control, or allow others' lack of awareness and self-restraint to control us, we have no freedom. Only by recognizing and mediating our own (in this sense) *negative* wildness together can we properly understand our relationship to the wild environments we depend on, sometimes most highly value, and have not quite learned not to destroy. Only then can it clearly be seen that wilderness is not some primordial form of pure nature antithetical to human civilization, but the very source of it and the freedom it can bring. This freedom is not ultimately the power to dominate, but in fact the power to be free from all human practices of blind domination—a *positive* wildness within resembling what is most valued in the wild Other—the freedom *not* to destroy, but discover.

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Part II
Restoration of Value and Meaning to Cultural Ecosystems

Chapter 6
Cultural Landscapes, Ecological Restoration and the Intergenerational Narrative

Paul Knights

6.1 Introduction

The dominant goal of nature conservationists is the conservation of biodiversity. In the UK, and throughout the "Old World" of Europe, the principal means through which this goal has been achieved is the preservation and restoration of traditional cultural ecosystems. This chapter has two purposes. Firstly, it is intended to contribute to the recent attempt to shift philosophical scrutiny from the restoration of *natural* ecosystems to the species of restoration practice that takes place within *cultural* landscapes. Secondly, I will argue that much of value and meaning will be lost – value and meaning that ought to be considered in deliberations over the adoption of alternative conservation strategies – if the preservation and restoration of traditional cultural ecosystems is forsaken. The first section questions the appropriateness of the demand – familiar from Robert Elliot's arguments concerning restored natural ecosystems – for restored cultural ecosystems to be authentic instances of original, pre-degradation cultural ecosystems. In the next section, I will argue that, despite the demand for authenticity being unjustified in relation to the stated biodiversity goals of conservationists, authenticity is often achieved to a considerable extent and, as such, the work of restorationists is valuable insofar as it succeeds in preserving items of cultural heritage. The third section grounds a distinct ethical argument for the restoration of cultural ecosystems in this overlooked value of the practice. The final section concludes by considering, in light of the foregoing arguments, the implications for cultural ecosystems and the value of their restoration of the recent pursuit of alternative biodiversity conservation strategies. I begin with a brief introduction to cultural ecosystems and restoration practice.

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The European landscape is a cultural landscape. Cultural landscapes are mosaics of cultural ecosystems, and a cultural ecosystem is "one that has developed under the joint influence of natural processes and human-imposed organisation" (Society for Ecological Restoration International 2004, 4). Examples are meadows, pasture, lowland heath, wood pasture, reedbeds, upland moor and coppice woodland. They were created and maintained – by grazing, burning or cutting – for a variety of agricultural, industrial and recreational reasons. To restore a cultural ecosystem is to initiate or accelerate the recovery of a damaged, degraded, transformed or destroyed cultural ecosystem.[1] This restoration may be necessary either because traditional land use practices have been abandoned and no alternative practices have replaced it such that natural processes are increasingly governing the site's ecological trajectory, or because traditional land use practices have been abandoned in favour of modern agricultural practices. Depending on the extent of degradation the ecosystem has been subject to, extraordinary measures that are not among the repertoire of traditional practices may have to be employed – such as the removal of nutrient rich topsoil on improved grasslands, the direct sowing of healthland species, or the burning of built-up vegetation in neglected reedbeds and fens – before traditional land management techniques to maintain the ecosystem in its desired state can resume.[2] This traditional management may then be executed by existing land managers whom conservation organisation assist with advice on grant applications[3] and training, but this chapter will focus on the approach by which conservation organisations take ownership of a cultural ecosystem and then mimic traditional land management practices using volunteers and employees.

6.2 The Demand for Authenticity

Some of the earliest reflections of environmental philosophers on the practice of ecological restoration produced two criticisms which centred on the ontological status of restored ecosystems. One criticism – from Eric Katz (1993, 1997) – was that restored ecosystems are artefacts. The other – from Robert Elliot (1982, 1997) – was that restored ecosystems are fakes. Even though Elliot's criticism was aimed at the restoration of natural ecosystems, it provides a useful conceptual framework to

[1] As the SER points out, much restoration activity will be directed toward "the reintegration of fragmented ecosystems and landscapes, rather than focusing on just a single ecosystem" (Society for Ecological Restoration 2004, 5). I will, however, continue to refer to "cultural ecosystem restoration" in the singular for the sake of simplicity and clarity. This is to be understood, where appropriate, as implicitly encompassing the (almost certainly more common practice of the) restoration of multiple cultural ecosystems or the restoration of a cultural landscape (i.e. a mosaic of cultural ecosystems).

[2] For reedbed, see Burgess et al. 2005, 183. For fen, see Burgess et al. 2005, 184. For grassland, see Ausden and Treweek 2005, 220–221. For heathland, see Dolman and Land 2005, 276.

[3] See for example Natural England, "Environmental Stewardship," <http://www.naturalengland.org.uk/ourwork/farming/funding/es/default.aspx> (accessed January 7, 2012).

investigate the ontological status – and the corresponding account of authenticity – of restored cultural ecosystems. I will reject Elliot's criticism and argue that the demand for authenticity in restored cultural ecosystems is too demanding in relation to the stated biodiversity goals of conservationists.

Elliot argues that for ecological restorationists to succeed in restoring a natural ecosystem it would be necessary for them to restore the following properties:

(i) the non-relational property of according with a natural design;
(ii) the non-relational property of being constituted by natural items;
(iii) the relational property of being the product of natural processes;
(iv) the relational property of having a natural and unbroken continuity with the distant past (Elliot 1997, 132).

Elliot believes that properties (i) and (ii), like other non-relational properties such as beauty, diversity, integrity and complexity, can in principle be restored. However, he claims that properties (iii) and (iv) cannot in principle be restored. Property (iii) cannot be restored because the human practice of ecological restoration involves at least some technological processes; a restored ecosystem can therefore never entirely be the product of natural processes. Property (iv) cannot be restored once it is broken simply because the past is outside our control. Therefore, restored ecosystems – even ones that accord with a natural design; are constituted by natural objects; and bear all the other non-relational properties that the original ecosystem possessed – are fakes, since they necessarily fail to bear relational properties (iii) and (iv).

Elliot's claims have received much unfavourable attention from restoration practitioners (Light 2008, 101). Although cultural ecosystem restoration is a kind of restoration that Elliot appears to be unaware of – his arguments exclusively address the products of the practice of *natural* ecosystem restoration – his arguments have nonetheless been interpreted as applying to restored cultural ecosystems and have thereby disenchanted restoration practitioners as to the possible contribution environmental philosophy may make to restoration theory and practice.[4] Despite later developing a concise and helpful typology of restoration projects which distinguishes faking – the creation of a replica of some particular object and the representation of that replica as the original – from restoring – bringing a damaged object back to its original condition – Elliot continues to use the term "faked nature" to refer to restored ecosystems. He justifies this continued use by pointing to the way that the term draws attention to the normative significance of natural origin, even where

[4]Examples of natural ecosystems restored in the U.S. are rivers (e.g. the Kissimmee River Restoration Project), wetlands (e.g. the Comprehensive Everglades Restoration Plan) and tallgrass prairie (e.g. the work of the Sauk Prairie Conservation Alliance). There is, of course, increasing evidence that the ecosystems and landscapes that are characterised as natural in the U.S. (namely, those that European settlers encountered in the eighteenth and nineteenth centuries) had in fact been the subject of long and significant human disturbance (see Callicott 2002). It may therefore be the case that the ecosystems that are restored by ecological restorationists in the U.S. are not natural in the sense that many have believed they are.

there is no deception involved.[5] Since Elliot continues to refer to restored ecosystems as faked nature, I think the criticism's application to restored cultural ecosystems needs to be considered. I will do this by considering what features of a given cultural ecosystem that has been subject to restoration would lead us to conclude that – despite a disruption in its continuity with the distant past – it remains an authentic instance of a cultural ecosystem of its type.

Consider a heathland whose management by burning and cutting was abandoned during the period of the Black Death.[6] As the population recovered to its pre-pandemic level, formerly cultivated land was reclaimed from the succeeding woodland and cultural ecosystems were restored.[7] After 25 years the heathland is in a considerably degraded state, with much dwarf shrub, grass and birch encroachment replacing the heather-dominated vegetation. However, it is not so degraded that we would say it was no longer the same ecosystem as existed before abandonment. It is therefore possible for the community to engage in what Elliot calls "token-restoration", where a particular object (in this case an ecosystem) that has been degraded or damaged is brought back closer to a past condition and therefore possesses the relational property of having an unbroken (albeit temporarily disrupted) continuity with the distant past (Elliot 1997, 101–102).[8] I would argue that the cultural ecosystem that results from that restoration effort would be perfectly authentic (i.e. non-fake) to the extent that each of the following conditions – in addition to an unbroken continuity with the distant past – obtain. Firstly, the restored heathland accords with the traditional design of that cultural ecosystem. The sense of 'design' to which a cultural ecosystem may accord or fail to accord amounts to a certain structure (say, the 'fells' and 'rides' structure of a coppice woodland), a certain species composition and a certain management regime. This is analogous to Elliot's naturalness property (i), the non-relational property of according with a certain natural design, in the sense that natural ecosystems will also typically exhibit a certain structure, species composition and even a 'management regime' executed by natural disturbances such as fires, floods, herbivory or disease. Secondly, the heathland was restored using the very same land management practices which had maintained the

[5] After developing the typology in Elliot 1997, 97–111, Elliot justifies his continuing use of the phrase "faked nature" on p. 132, and employs it again on p. 143.

[6] Recent research suggests that the Black Death could have been responsible for Europe's "Little Ice Age" due to the post-pandemic forest regeneration acting as a terrestrial carbon sink (see Van Hoof et al. 2006).

[7] It might be objected that the return of communities affected by the Black Death to reclaim formerly cultivated cultural ecosystems should not be classified as – and considered alongside – the modern practice of ecological restoration. I acknowledge that it is anachronistic to claim that fourteenth century peasants were carrying out *ecological* restoration (just as it is anachronistic to claim that they were restoring cultural *ecosystems*), but I think that it is entirely plausible to claim – and all that needs to be the case for my purposes – that they were engaging in *restoration*. As Jordan (2000, 23) observes, restoration is an idea stretching back to biblical times in the fallowing of land.

[8] If it had taken the local population longer to return to the heathland and it had fully succeeded into woodland such that it would no longer be appropriate to say that it is the same cultural ecosystem as existed before its abandonment then only "type-restoration" would be possible.

ecosystem before the disruption. Thirdly, the restoration of the heathland was executed for the very same reasons that drove the creation and maintenance of the ecosystem prior to its disruption, namely, to derive a livelihood. Lastly, the heathland was restored by the very same community that created and cultivated the ecosystem prior to its disruption; we can imagine that surviving members of the same family that managed the land prior to the disruption returned and restored it. The claim that the above example was of a restored cultural ecosystem which achieved authenticity was that the following properties – in addition to unbroken continuity with the distant past – were restored:

(i) accordance with a traditional cultural design;
(ii) being the product of traditional techniques and tools;
(iii) being the product of a certain human motivation (namely, the motivation to derive a livelihood);
(iv) being the product of a certain human community.

Elliot's criticism of the practice of ecological restoration was that its products were fakes. However, when considering the implicit demand for maximal authenticity that this places on restoration practitioners working in Old World cultural landscapes, it seems both unfair and inappropriate to demand that the above properties are restored given that their goal is the maintenance and enhancement of biodiversity. In labelling the demand for authenticity unfair and inappropriate at this stage I am not precluding criticising the biodiversity-related goal of many conservationists as excessively narrow or as insensitive to the values possessed by the ecosystems in which it is pursued, and to a large extent that is what this chapter will do. However, my point for the time being is that, insofar as most conservationists' goal *is* solely biodiversity-related rather than to achieve authenticity, and insofar as the membership organisations that they have founded to pursue this goal are so constituted as to mandate only activities which further this aim, it is in this sense unfair and inappropriate to demand that they pursue a distinct goal requiring additional and different resources. While broad accordance with a cultural design will be necessary to preserve the species-level biodiversity that the ecosystem supports and the ecosystem-level biodiversity that it embodies, the other properties enumerated above are not necessary to restore in order to meet their objective. The conception of authenticity that does so require them is unjustifiably demanding, given the goal that conservationists are at present motivated to pursue and the limited resources they command. However, despite the unwarrantedly demanding conception of authenticity that has emerged from transferring Elliot's arguments to the practice of cultural ecosystem restoration, it is nonetheless often the case that properties (ii), (iii) and (iv) *are* restored to some extent by conservation organisations; many conservation organisations *do* use traditional techniques and tools, many members of communities with long associations with the cultural ecosystems undergoing restoration *are* involved in the work, and sometimes the more traditional motivation of deriving an income *is* woven into restoration projects. In the next section I will examine the value of restoration projects which meet the more demanding conception of authenticity.

6.3 The Demand for Full Value Restoration

This section is an examination of the value possessed by restored ecosystems that meet the more demanding conception of the authenticity of restored cultural ecosystems. As I argued above, although it is unjustifiable to require conservation organisations who engage in the restoration and subsequent management of cultural ecosystems to adhere to the robust conception of authenticity that may be derived from Elliot's arguments, they frequently succeed in doing so. I will again use the arguments developed by Elliot in relation to the restoration of natural ecosystems as a helpful frame for the discussion. I will argue that Elliot's claim that ecological restoration projects should be judged according to the standard of "full value" restoration is not only – like the requirement for authenticity – unduly demanding, but also inappropriate due to the peculiar way items of cultural heritage are valued.

Elliot distinguishes *full* value restoration from *equal* value restoration, claiming that full value restoration would be accomplished "not merely [by] creating something equal in value to something else that has been degraded or destroyed, it would also involve achieving that equal quantity of value by creating something with the very same pattern of value adding properties earlier possessed by the thing degraded or destroyed" (Elliot 1997, 80). Value adding properties are those properties such as complexity and beauty that, other things being equal, function to increase the overall value of the thing that possesses them (ibid., 10). Again, we must ask whether this demand for full value restoration is appropriate for the restoration of cultural, as opposed to natural, ecosystems.[9]

Cultural ecosystems possess many kinds of value, each grounded in a particular set of value adding properties. Firstly, *aesthetic* value has been attributed to cultural ecosystems from the time of the Romantic poets. Indeed, it is this aesthetic value that motivates much of the current effort to preserve cultural ecosystems and landscapes. More recently, *recreational* or *amenity* value has been attributed to cultural ecosystems on the basis of the opportunities they provide for such activities as walking, mountain biking, bird watching and other forms of outdoor recreation. *Ecosystem service* value is attributed to cultural ecosystems on the basis of their role in providing services such as nutrient recycling, pest control, soil production, water purification and erosion and flood control (Duraiappah and Naeem 2005).[10] Cultural ecosystems are also of *scientific* value in virtue of the potential study of their resident

[9] It should be noted that Elliot argues that restored (natural) ecosystems necessarily possess less value than original ecosystems since, on his account, not only are there two non-relational properties that cannot in principle be restored (continuity with the distant past and being the product of natural processes), but these very properties are *value intensifying* properties, acting "in concert with other properties to produce an overall value well in excess of the sum of the value of those properties, and, for that matter, the value [intensifying] property itself" (Elliot 1997, 81). Restored ecosystems, therefore, will always of necessity be compromised with regard to the value they possess in relation to the original natural ecosystem.

[10] Ecosystem service value is, like each of the values I am considering here, attributed to natural as well as cultural ecosystems.

nonhuman organisms, and of the ecological relationships that obtain between them and the abiotic environment and human management activities. *Biodiversity* value is, as I have observed, the value that conservation organisations are explicitly working to conserve and restore.[11]

If Elliot's criticism that restored natural ecosystems possess less value than original, pre-degradation natural ecosystems is to transfer to the case of restored cultural ecosystems then it has to be the case that there are some value adding properties of original, pre-degradation cultural ecosystems – and therefore the classes of value that these properties ground – that cannot be restored. It seems to me that full value restoration can be achieved for each of the above kinds of value. Firstly, I think it is uncontroversial to claim that the value adding properties on which the attribution of *economic* and *recreational* or *amenity* value is based can be restored; numerous landscape restoration projects intended to support the economy of, and recreational opportunities afforded by, the National Parks of the UK are engaged in by their respective Authorities. Secondly, the value adding properties that ground the attribution of *biodiversity* value are, as I have argued, the principal objective of the restoration of cultural ecosystems engaged in by UK nature conservation organisations, who regularly claim to have either restored the same level of, or even increased, the biodiversity of their nature reserves. If this is the case, then the *ecosystem service* and *scientific* values based on the presence of biodiversity may also be restored. The restoration of the value adding properties on which attributions of aesthetic value are grounded is potentially more difficult, depending on how broad a conception of aesthetic properties one has. I will not pursue this issue further here, but I believe it is plausible to claim that full value restoration can be achieved regarding the above classes of value.

However, cultural ecosystems possess another kind of value which I will argue that it would be undesirable to fully restore, namely, cultural heritage value. This kind of value is borne by objects that are of historical importance in the culture of a region or nation. The traditional cultural ecosystems that have survived the degradation and destruction of the past 75 years have become important and rare embodiments of our agricultural and social history. The value adding properties that ground this kind of value attribution are the very ones that we have been examining with regard to the ontological status of restored cultural ecosystems; having an unbroken continuity with its pre-degradation self, accordance with a traditional cultural design, being the product of certain tools and techniques, being the product of a certain human motivation and being the product of a particular human community.

[11] It is true that for each of these values it is not necessarily the case that degraded ecosystems that warrant restoration will no longer possess them. For example, abandoned pastoral landscapes may exhibit a certain aesthetic charm residing in their deserted and forsaken appearance; unhealthy ecosystems can provide many ecosystem services, albeit perhaps for a limited time, as Ronald Sandler (2003) argues; and there is much scientific interest in the study of, say, the process of succession in neglected cultural ecosystems. But Elliot's point is regarding full value restoration, and so it is not merely any kind of aesthetic, ecosystem service or scientific value that is to be restored, but the very kind – based on the very same value adding properties – possessed by the pre-degradation ecosystems that must be restored.

I argued that it is unfair and inappropriate to level an accusation of fakery at conservation organisations for failing to restore these properties since they are understandably concerned primarily with the property of accordance with traditional cultural designs in relation to their stated goal. I also noted, however, that these properties frequently are restored. In so doing, conservationists not only succeed in restoring those properties that ground attributions of biodiversity value to cultural ecosystems, but also those for cultural heritage value. We can now enquire as to whether there is any reason to strive for the full restoration of the latter class of value.

Consider a scenario in which a conservation organisation takes ownership of two degraded coppice woodlands with the intention of restoring them for their biodiversity value. Both have been neglected for some years and are in a degraded state; the coppice stools have been left for some time past their optimal 10-year cutting cycle and, as a consequence, the diversity and abundance of ground flora is diminishing as the shading canopy increases. One of the woodlands is restored to a non-traditional cultural design (for example, it is put onto a 25 year, rather than 8–15 year, felling cycle), using chainsaws to fell the trees and tractors to extract the timber. The organisation's employees and non-local contractors execute the work, and once the timber is extracted it is burnt or otherwise discarded. The other woodland is restored in accordance with an established cultural design, using traditional woodland hand tools called billhooks and horses to extract the timber. Volunteer members of the local community whose predecessors have a long association with the woodland execute the work under the guidance of the staff of the conservation organisation, and the timber is worked by local craftspeople into "hurdles" (fencing panels), tool handles and baskets, or made into charcoal, and the products are sold locally. The former woodland, in deviating from the traditional cultural design of coppice woodlands – particularly a felling cycle that is determined by the usefulness of the products that can be made from its timber – warrants a lesser attribution of cultural heritage value than the latter.

Consider that property (iii) – the property of being the product of a certain motivation, namely, to derive a livelihood – is not fully restored in the latter of the above examples. This is not only because I wanted my example to reflect current practice in UK conservation, but also because it is unlikely that an item of cultural heritage that fully restored property (iii) would be valued as such. The motivation of our predecessors to create and maintain the cultural ecosystems that we now desire to restore for the sake of biodiversity would have been closer to the motivation to merely survive, which is quite different from the motivation of the people in my example. If visitors to the woodland found not contented downsizers who have freely chosen to try their hand at making a modest living from the sale of their products, but bonded serfs impelled by a lack of alternatives or the threat of starvation, they would be unlikely to congratulate the conservation organisation for their full restoration of property (iii) and attribute a greater quantity of cultural heritage value to the woodland. The cultural heritage value attributed to an object may well be partly grounded in the recognition of the circumstances of, and motivation for, its creation, but if the object is damaged and we desire to restore it, this is not to say

that we would necessarily desire it to be restored in the very same circumstances and for the very same motivation. Cultural heritage value is mostly attributed to objects, traditions and environments that have become somewhat divorced from the circumstances of their creation and historical use; to label something as an item of heritage implies that its time has passed, though this need not necessarily be so. But we also desire to understand and honour our heritage by preserving it and, where appropriate, engaging with it in some limited way.[12] While some items of heritage can only be appropriately preserved, and thus honoured, in museums, many items can be used; vintage cars can be driven, Spitfires flown and handlooms spun. Further, much of our heritage is not constituted by objects, but by activities. The woodland crafts referred to can be tried by the curious and taken up by the avid, and in this way honoured as part of our heritage. Lastly, among those things that constitute cultural heritage are the attitudes, ideas, aspirations and, indeed, motivations of our predecessors. Again, these may be honoured by attempting to understand them and, if they are found valuable, perhaps adopting them. But not in all cases will *we* find them valuable or desirable, even if we come to understand why our predecessors did. And in some cases, although part of our cultural heritage and for that reason valuable, the motivations and circumstances of some of our cultural ecosystems will not be such that we judge restoration of them to be desirable. Those who take up the woodland crafts and derive a small income from them are, in a limited way, engaging with their heritage by sharing the motivation with their predecessors to derive an income. Visitors to the woodland may find additional value in it as an item of cultural heritage value when they discover that some of the people who work the wood are making a living from it (and better still if they learn that they are descendents of those who worked in the wood in decades or centuries past). But there is only so far that this kind of authenticity can go before it becomes a disvalue. I conclude, therefore, that due to the peculiar way we value items of cultural heritage, Elliot's demand for full value restoration is inappropriate in many cases of cultural ecosystem restoration.

6.4 Cultural Heritage, Narrative and the Intergenerational Contract

The previous section developed an understanding of cultural ecosystems as items of cultural heritage. In this section I will further develop this theme by applying an ethical argument developed by Janna Thompson – grounded in an intergeneration contract – for the preservation and restoration of items of cultural heritage. I will fortify this proposal with an application of "the narrative approach" as deployed

[12] As John O'Neill (1997, 25) argues, "one major problem with the heritage industry is the way it often attempts to freeze historical development… The object becomes a mere spectacle taken outside of history." This removal from history may take the form of refusing to allow people the opportunity to engage with an item of heritage, even if only in a limited way.

by John O'Neill. I will then apply this argument to the specific case of cultural ecosystems. This argument is intended to supplement the often insufficient appeal to biodiversity value that conservationists make to justify their endeavours. As Rackham observes, "[t]he case for conservation is weakened by lack of coordination between those concerned with scenery, wildlife, [and] antiquities" (Rackham 1986, 86). Where conservation organisations have an opportunity to highlight the opportunities their work provides as a way of connecting our lives to those of our predecessors, a wider constituency may be found to support their efforts. This section is also an attempt to "thicken" the normative discourse with which we might engage in practical deliberation concerning potential conflicts between biodiversity and cultural heritage value.[13]

There are several kinds of items of cultural heritage, each of which are associated with or embody the history of a community of people; *objects* (buildings, monuments, artworks, artefacts), *traditions* (crafts, festivals, games, cuisine, fashions, dances, livelihoods, ideologies, motivations, attitudes) and *environments*, such as the lanes between the terraced houses of coal mining towns, the gardens of stately homes, drove roads, industrial environments and, of course, the cultural ecosystems that are the focus of this paper. The item may symbolise a movement, period or important historical event; have been valued or disvalued by past generations; or have had a formative influence on the character and deeds of members of the community (Thompson 2000, 244). The reasons advanced to justify the preservation of an item of cultural heritage are often aesthetic, economic or educational. However, Thompson has developed an *ethical* justification grounded in an intergenerational contract, which she applies to the case of natural environments. This contract is grounded in the posterity-related desires that each generation has concerning their legacy – a historical narrative embodied within objects, traditions and environments – to their successors (ibid., 249). Our posterity-related desires concerning this legacy include the desires that our successors value, preserve and, where necessary, restore the objects that we leave them; continue the projects, traditions and institutions that we pass on to them (ibid., 251–252); and endeavour to understand and appreciate our values, deeds and characters (ibid., 249). Such a desire requires of our successors that they do not wilfully or ignorantly destroy, but rather preserve and pay respectful attention to, the objects, traditions and environments that embody significant elements of the historical narrative that we leave them (ibid., 255). The significant elements will be those that (i) we valued, cherished, protected and wanted our successors to inherit, or (ii) had a significant influence on our values, deeds and characters (even if we did not value or, further, even if we actively disvalued them). Firstly, the fact that we valued the object, tradition or environment provides our successors with a reason to seek to understand and appreciate why it was so valued. Such appreciation cannot be gained from

[13] For example, if research demonstrated that restoring a degraded coppice woodland by instigating a 20-year felling cycle instead of the traditional 8–15 is ideal for the (rare) common dormouse (*Muscardinus avellanarius*), then the restoration of biodiversity value would come into conflict with the restoration of cultural heritage value.

imagination or from historical records; it requires that the object, tradition or environment itself be preserved, and that respectful attention is paid to it (ibid., 251). Secondly, Thompson argues that to fully respect our legacy requires of our successors that they understand their lives as a continuation of the narrative that we pass on to them, and that they understand their values, deeds and characters in relation to a history in which ours are accorded due recognition (ibid., 255–256). Thompson argues that the failure to preserve a particular object, tradition or environment that we valued, or to fail to respect the legacy by refusing acknowledgment of the way in which *their* values are shaped by those of their predecessors (i.e. *our* values) is a manifestation of a moral fault in our successors such as discourtesy or impiety (ibid., 252). The destruction of the objects and environments, and the discontinuation of the traditions that we bestowed upon them is a manifestation of the refusal of such acknowledgment. The content of the intergenerational contract invoked by Thompson, then, is constituted by the acceptance of the following by each generation: if we believe that our successors have an obligation with respect to us to (i) seek to understand and appreciate our values by preserving and paying respectful attention to the objects, traditions and environments that we have treasured, and (ii) preserve and pay respectful attention to the objects, traditions and environments that have had a significant influence on our values, deeds and characters, then we have a corresponding obligation with respect to *our* predecessors (ibid., 249).

Thompson's argument, while persuasive, relies largely on the "thin" normative concept of obligation and a metaethical commitment to impartiality. To enrich the normative discourse we could deploy to articulate the argument that we ought to respect our predecessors' legacy I will augment Thompson's account with a further claim which she rejects the need for; the claim that the dead can be wronged (ibid., 249). As O'Neill (1993, 28) has argued in the context of a discussion of our obligations with respect to *future* generations, the belief that the deceased *can* be harmed or benefited has only recently been abandoned for a "temporally local perspective on our goods [which] is founded in part on a pervasive but mistaken view of what goods and harms can befall us – that only that of which we are aware can harm us". To make this argument we can employ a notion that already comprises an element of Thompson's account of the intergenerational contract, namely, narrative. Consider the life of an individual as a narrative. "Narratives", O'Neill (ibid., 30) explains, "do more than describe lives; they contain an evaluative component about how well those lives went." One way of conducting this evaluation is to determine which genre – tragic, comic, heroic, and so on – the narrative belongs to, and this determination can be made "only from the viewpoint of the end of the story" (ibid., 30–31). For example, one can never be sure whether a narrative is a tragedy unless one knows how it ends. Crucially, the end of a person's life may not be the end of their life story, and therefore not the proper point from which to conduct its evaluation. Many of our projects transcend the scope of our own lives; we constitute societies, found charities, campaign for legislation and conduct research into cures for diseases. The success or failure of these long-term projects is dependent on the decisions and actions of our successors. The narratives of our lives continue as long as the projects with which we were associated continue. For example,

the passing of the legislation after our death for which we long campaigned may render our life a success; our successors have benefited us in rewarding and honouring our efforts with that which we most desired. But if our successors subsequently misuse the legislation for purposes antithetical to those for which we advocated it, they have harmed us by realising our worst fears, disrespecting our wishes and wrongly associating our name with something we would consider disgraceful; our life narrative is rendered tragic. This narrative approach to the evaluation of a person's life allows us to see that the living can benefit or harm the dead. Moreover, this benefit or harm can be articulated in a rich normative discourse, employing "thick" ethical concepts such as disrespect, dishonour, discourtesy and their opposites. While Thompson does invoke such evaluative terms, it is difficult to see how we can wrong our predecessors if, as she claims, they have no rights or interests (Thompson 2000, 249). This argument justifies the attribution of such vices by acknowledging that the dead can be wronged. It can then be employed to augment Thompson's argument for the existence of an intergenerational contract; not only can we appeal to the metaethical commitment to impartiality to ground our obligations to respect the legacy of our predecessors, but also to the harm or benefit we can do them in the manner we continue their narrative.

I have argued until now for the preservation and restoration of items of cultural heritage in general. Let me now apply these arguments to the specific case of the cultural ecosystems that are the subject of this paper. Firstly, recall that the intergenerational contract imposes an obligation on us to (i) seek to understand and appreciate the values of our predecessors by preserving (and, where necessary, restoring) and paying respectful attention to the objects, traditions and environments that they valued, and (ii) preserve (and, where necessary, restore) and pay respectful attention to the objects, traditions and environments that had a significant influence on our predecessors' values, deeds and characters. With regard to (i), it is clear that our predecessors would have attributed certain values – economic value and inheritance legacy value – to the cultural ecosystems that they created, cultivated and inhabited.[14] That they did so imposes obligation (i) on us, their successors; the obligation to endeavour to understand and appreciate the genesis and nature of these values, and their manifestation in their deeds of creating, cultivating and, in extraordinary circumstances such as during the Enclosure Acts of the eighteenth and nineteenth centuries, protecting them. With regard to (ii), it seems clear that the cultural ecosystems that are currently preserved and restored by conservation organisations for the sake of their biodiversity value had a significant influence on the character and activities of our predecessors; the cultural ecosystems that are our concern are of considerable antiquity and any account of the history of a community or region of the Old World, or indeed of the history of the region itself, is unlikely to be complete

[14] Low population mobility, strong filial ties and, up to the Middle Ages, a feudal system which bound peasants to particular estates, mean that most cultural ecosystems will have been worked by the same families and communities for many generations. Even though the vast majority of our predecessors would not have owned any portion of the cultural ecosystems in which they worked and resided, it seems likely that they would nonetheless have valued them as their inheritance from their predecessors and as a legacy to their successors.

without significant reference to them.[15] The relationships that our predecessors had with the cultural ecosystems they created, cultivated and inhabited were pervasive; they bestowed vernacular names upon their constituent species which then re-entered the language with new meanings associated with that which they labelled; children's games were woven around the plants and animals they encountered there; wild species were harvested from them and formed the basis of local cuisines; places were named after them; political causes were fought in and over them; medicinal plants were cultivated in and harvested from them; folklore and mythology surrounded them; and they determined much of the development of skills and crafts.[16] That our predecessors had such rich relationships with these ecosystems imposes obligation (ii) on us; to understand cultural ecosystems as the source of these influences and to appreciate how these influences have resonated throughout the narrative which we are continuing requires that we preserve and, where necessary and possible, restore cultural ecosystems. And again, the argument that such obligations are imposed upon us can be supported by reflecting on the harm we do our predecessors by failing to meet them; in destroying the cultural ecosystems that they created and allowing the skills and crafts that they cultivated for their management to be lost from memory we end their narrative (and I think it is fair to say that their narrative ends here) in a sorrowful way. In common with O'Neill (1993, 33), I do not wish to suggest that every embodiment of the narrative of our predecessors must be preserved and restored, but where the burden is not great – for we must acknowledge that our successors will have problems and priorities of their own such that we cannot reasonably demand they unconditionally respect *our* legacy – the obligations of the intergenerational contract, and the recognition that we can harm or benefit our predecessors, ought to motivate us to preserve and restore traditional cultural ecosystems. Further, this argument does not preclude withholding respect from, and even in extreme cases condemning our predecessors if, on reflection, their actions or attitudes that are embodied in the cultural ecosystems they created are found to be blameworthy or reprehensible; for example in cases of driving certain species to extinction, or, in the case of more recent generations, the destruction of thousands of miles of hedgerows. However, absent any overriding reasons against doing so, the legacy of our predecessors should be respected, and therefore preserved and restored.

In summary let us return to the traditionally restored coppice woodland to illustrate the narrative-augmented intergenerational contract argument for the preservation of cultural ecosystems *qua* items of cultural heritage. The conservation organisation is manifesting respectfulness toward our predecessors; in restoring the coppice woodland in accordance with the design created and maintained by past generations, employing traditional techniques and tools, allowing volunteers from the local community to be involved in the restoration and to engage in traditional crafts,

[15] Many extant heathlands in the UK date from the Neolithic (5000–4000BP) and Bronze Age (3600–3000BP) (Dolman and Land 2005, 268); coppice woodlands from the early Neolithic (Rackham 1986, 321); and reedbeds from the Bronze Age or Middle Ages (ibid., 387).

[16] See for example the numerous place names incorporating references to heathland in Rackham (1986, 287). For a fuller account of the cultural relationships human communities have formed with species and ecosystems, see Knights (2008).

it is providing opportunities for understanding and appreciating the hardships our predecessors must have endured and the pleasures they must have taken in their lives lived in daily struggle against, as well as in intimate cooperation with, natural processes. Furthermore, it is restoring an environment that, in a long history of association that stretches back to the Neolithic and that has only recently been abandoned, shaped and influenced the lives of our predecessors. And in restoring the woodland we are ensuring that the narratives of the individuals whose lives were lived in intimate association with it are not ended tragically. In contrast, the pursuit of higher biodiversity value at the non-traditionally restored woodland, while in the pursuit of a worthy goal, manifests disrespectfulness toward our predecessors by failing to preserve that which they created and valued.

6.5 New Challenges for Traditional Cultural Ecosystems

It is rare for conservation organisations to explicitly justify their activities by appeal to the heritage value of either the cultural ecosystems they preserve and restore or of the management practices they employ. My examination of the practice of cultural ecosystem restoration suggests that conservationists would be well advised to accept and embrace this value of their work. But as things currently stand, it is the conservation and enhancement of biodiversity that motivates the preservation and restoration of cultural ecosystems and thereby – inadvertently but undeniably – protects important items of cultural heritage and thereby respects the legacy of our predecessors. But conservationists are increasingly advocating alternative means of achieving their goal. Firstly, an approach called "creative conservation" is increasingly being adopted whereby instead of the "direct mimicry of some target community that once existed" the intention is to establish "essentially new and indeterminate communities and habitats" that "may have similarities with the old but are essentially a product of a different time, just as hay meadows were a product of their own tradition" (Sheail et al. 1997, 232; Scott and Luscombe 1995, 14). This approach is intended to be a movement away from the "slavish adherence" to traditional management and the assumption that our predecessors' management of cultural ecosystems was always benign or beneficial for biodiversity and thus should be mimicked.[17] Secondly, in recent years a new conservation strategy –

[17] This assumption – that our predecessors had inadvertently, despite it forming no part of their motivations and, indeed, in many cases being inimical to their interests, discovered just how to manage ecosystems in a way that maximised their biodiversity value – may have seemed reasonable to the founders of the conservation movement in the early to mid-twentieth century. They had inherited the rapture with which eighteenth and nineteenth century natural historians had described the very cultural ecosystems which were rapidly being lost to the depauperate landscapes of intensive, mechanised agriculture. Creative conservation is the result of the recognition that since traditional management was "[d]esigned to exploit rather than conserve" it may well be the case that many "species…[have] survived despite, rather than because of, such practices" (Sheail et al. 1997, 231). See also Hambler and Speight (1995), and Jarman (1995).

rewilding – has emerged.[18] Rewilding emphasises the restoration of large areas, the granting of free reign to natural processes, the withdrawal of human management and the reintroduction of large herbivores and top predators. This strategy is gaining supporters among both Old and New World conservationists for two reasons relating to biodiversity. The first is that recent ecological research emphasises the importance of the top-down regulation exerted by species occupying the highest trophic levels (i.e. top predators) for biodiversity.[19] The anticipation of the reintroduction of large predators justifies the rewilding approach's emphasis on large areas of wild land. The second, also justifying larger conservation areas, is that climate change is anticipated to have a catastrophic effect on components of biodiversity dependent on small nature reserves isolated within a wider, inhospitable agricultural environment. For any given area, the pursuit of creative conservation or rewilding will be incompatible with the preservation and restoration of any traditional cultural ecosystems at that site, since both strategies require deviation from the structures and composition of these ecosystems. The very motivation that has been responsible for their protection until now – the conservation of biodiversity – appears poised to constitute an additional threat to the perpetuation of their role in our narrative. I hope I have shown that much of value and meaning will be lost – value and meaning that ought to be considered in deliberations over the adoption of alternative conservation strategies – if the preservation and restoration of traditional cultural ecosystems is forsaken.

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[18] See Taylor (2005) for an overview of rewilding projects in the UK, and Watson Featherstone (2004) for an account of a large rewilding project in the Scottish Highlands. See also Donlan et al. (2006) for a bold (Pleistocene) rewilding proposal for the U.S.

[19] This recent recognition of the importance of top-down regulation has led to a reassessment of the orthodox view that top predators are relatively unimportant elements of natural systems (see Foreman 2004, 119–124).

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Chapter 7
Enduring Nature

Glenn Deliège

7.1 Introduction

In his contribution to this volume, Paul Knights argues that some of the most notorious anti-restoration arguments, those worked out by Eric Katz and Robert Elliot, are in need of a revision if they are to be relevant to the practice of nature restorations in the Old World. Indeed, Old World nature is very different from New World nature, or at least, it is believed to be different. While in the New World one can still find "wilderness", in the sense of land untouched or relatively untouched by human interference, no such land exists anymore in Europe. At least, that was the story up until the relatively recent past. In the New World now too one is realizing that many landscapes that are deemed "wilderness" are in fact landscapes thoroughly worked over by First Nation peoples.[1]

Although early European conservationist[2] movements were often influenced by their American counterparts, and as such venerated the ideal of an untouched nature, the realization that much of the cherished landscape would disappear if certain forms of human exploitation of the landscape stopped quickly sunk in.[3] The European

[1] In many places, North-American landscapes seem to be as historically layered as European ones, yet this fact had until recently scarcely been recognized, let alone incorporated into conservation practice (see, for instance, Nabhan 1995).

[2] I will use the term "nature conservation" as a general term encompassing both nature "restoration" and "preservation". Whether there is actually a sharp distinction between "restoration" and "preservation" is discussed later in this chapter. For now, it is important to note that I use "conservation" as a general term to encompass both nature preservation and restoration, thereby deviating a little form the common use of the term.

[3] For an excellent history of nature conservation in the context of the Lowlands, see Van der Windt (1995).

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landscape is and was "humanly mediated": a landscape that got its appearance through a delicate interplay between natural processes and human manipulation of those processes.[4] In traditional, Old Agricultural European landscapes, culture and nature are often so melded together that it is hard to distinguish between the two. What is clear however, is that if certain traditional land uses are changed, the landscape changes with them, often completely changing its appearance and character. Open heaths for instance slowly turn into closed woodlands once grazing, mowing, sod cutting and burning are stopped. And with the heath, all species dependant on it disappear too.[5]

In Europe, conservation has therefore always been about trying to maintain old agricultural landscapes in their original, pre-industrialized state. This can be achieved by encouraging locals to keep on managing the land in a traditional way. Increasingly, however, traditional management practices have to be carried out by conservation organizations in special reserves, because the traditional practices have become so unprofitable and unproductive that even a system of subsidies no longer provides an adequate incentive to keep managing the old agricultural landscapes in traditional ways. As Knights (Chap. 6, in this volume) correctly points out, this often results in conservation agencies no longer using the traditional management practices, but using practices that "mimic" the traditional ones, practices that have often been tweaked to ensure maximum biodiversity conservation. This results in landscapes that are often largely similar to, but not exactly the same as the traditional agricultural landscapes they replace.

Given this different ecological context, it is hardly surprising that there are different sensibilities regarding nature conservation practices and the value of nature between the Old and the New World. What stands out the most of course, is the insistence of many North American environmental philosophers on the importance of wilderness, land untouched by human hand. Meddling with nature, even if done in a careful way, is often frowned upon in New World environmental philosophy. The work of Robert Elliot and Eric Katz on nature restorations can be seen as exemplary of this tendency: according to them, restored nature cannot be something else than faked or artificial nature.[6] Indeed, nature restoration can easily be dismissed as a contradiction in terms once one starts off from the premise that real nature is that

[4] I borrowed and translated this term from the work of Schroevers (1999).

[5] Standard paleoecological theory holds that almost all of Europe prior to the advent of agriculture consisted out of closed canopy forests. This has always formed a problem for European conservationism, in the sense that many of the species present in our current European landscapes are light-loving species which were able to colonize places beyond their original ranges because of the clearing of the forest for agricultural purposes. There are however ecologists, among which most notably Dutch ecologist Frans Vera (1997), who claim that the original European landscape was more open and park-like. The theories of Vera have however sparked off a lively ecological debate in which they have been roundly criticized, vindicating the consensus that (at least Western Europe, but probably all of Europe) was and would become a closed canopy forest under wilderness condition. See Van Vuure (2003) and Rackham (2006) for an overview of the relevant discussions.

[6] Robert Elliot is of course of Australian origin. However, Australia being part of the New World, Elliot works from an ecological context that is more similar to the American then the European.

which is "untouched by human hands". Such arguments against nature restorations are much harder to make in Europe, as there is no nature left that is untouched by human hands. That does not mean however that anything goes as far as nature restorations go in Europe. Knights (Chap. 6, in this volume) for instance shows how Elliot's anti-restoration stance can be reinterpreted to evaluate European restoration practices, and that there is a good case to be made that we are under the obligation to try and honor traditional landscapes and their management practices while restoring nature on the basis of their heritage value and the respect we owe to our predecessors.[7]

I will not attempt to develop my own account of why we might be under the obligation to respect traditional agricultural landscapes and the practices that gave rise to them when restoring Old World nature. What interests me here, is how nature still plays a role in the justification and evaluation of restoration practices, especially in an Old World context. Indeed, despite my previous remarks on the different ecological context between the Old and the New World, and the role humans play in that ecology, the idea of nature as something which is pre-given to human action and which we should respect, still plays a crucial role in the evaluation of European restoration practices. What should we make of the appeal to "nature" as an evaluative criterion in the context of the restoration of landscapes that have been thoroughly humanized? I will show that whenever "nature" is invoked as a criterion in European restoration practices, it does not refer to an ontological entity "nature". Rather, such appeals evince of an implicit understanding of the need to reject the instrumentalization of whatever one aims to restore.

In "Environment as Cultural Heritage" Jana Thompson (2000, 247) correctly remarks that "many people derive a special value from being in the presence of objects that were actually made or used by people of the past, environments that they actually lived in, scenes they celebrated." Sadly, though, she concludes that why this might be so "can be best explained by psychologists". I believe that philosophers can also have a great deal to say about why this is the case. Certain objects seem to hold a surplus of meaning, in the sense that they point to something beyond themselves while at the same time fixing the attention upon themselves as unique and irreplaceable objects. In such instances, we can speak of objects having a "strongly embodied meaning": the meaning, or value, such objects have cannot be expressed or instantiated other than through their particular material manifestations, yet at the same time the meaning they have cannot be reduced to their particular material manifestation either. It is my contention that natural areas posses such strongly embodied meanings, and it is precisely because natural areas or objects posses such meaning, that we reject their instrumentalization.

I will try to prove my case in three steps. First, I will use a recent article by Joachim Mergeay and Luc De Meester to show how "nature" still plays a paradoxical role in European restoration efforts. Next, I'll look at the work of Eric Katz to show how the rejection of the instrumentalization of nature is inherent in the desire to restore

[7] I reinterpreted the work of Elliot to make it suitable for use in a European context in a totally different direction in Deliège (2010).

nature itself. I will then go on to show how this rejection is tied up with the strongly embodied meaning of natural areas and natural objects, to end with a few remarks on the danger and necessity of permanence in restoration and preservation.

7.2 Mowing Meadows

Restoring nature can be a frustrating affair. Restorationists often have to go through great tribulations, sometimes without getting the desired results from their efforts. Take for instance the restoration of old meadows. An "old meadow" is a technical term for a meadow that has not yet been farmed in a modern, industrial, intensive way. They are typical representatives of the European old agricultural landscape. Old meadow soils usually have a low nitrate content, which results in the presence of an abundant and specific flora. Because present day industrial farming is all about increasing productivity, industrially farmed meadows show a high nitrate soil content through intensive fertilization. Such modern meadows only support a handful very competitive and relatively banal species of plants. Old meadowland is therefore highly prized by conservationists. Over the last half century, a lot of it has disappeared, usually through the intensification of farming methods. In some cases, when the intensification of production did not prove cost-effective, old meadows were simply abandoned or planted with poplars. If regular mowing is stopped, all meadows will slowly start to turn into forests, at least in the Western European climate. First, the uncut grass will smother other small and more delicate herbs. Once the grass starts to die back, it will compost and increase the nutrient levels in the soil, leading to the invasion of bigger, more robust and competitive herbs. In between those bigger herbs, the first shrubs and later trees will be able to get a foothold, and once they have matured, their canopy will shade out the remaining typical meadow herbs and grasses.[8]

Because of the intensification of farming and the lack of traditional management on the remaining old meadows, many old meadow species, among which a number of highly valued orchids and fungi, have become very rare, especially in those areas of Europe where agriculture has been strongly intensified, as it is throughout most of Western Europe. Once an old meadow has been intensively farmed, it is usually irrevocably lost, but if it has only been overgrown by trees and shrubs or planted with poplars, it can usually be restored to its former state. Many conservation organizations, when they get a hold of some piece of reforested old meadow, will therefore decide to restore it to its previous condition. Restoring meadowland from forest is however a strenuous effort: first, the trees and shrubs need to be removed. For this task one cannot use heavy machinery, because this would compact the soil too much. All trees need to be manually chainsawed and the logs need to be hauled out by hand or horse. Once trees and shrubs are removed, the area will have to be mown regularly, as the first plants that reappear after clearcutting will be weedy, competitive

[8] See footnote 4.

herbs and grasses that can profit from the nutrients that have built up in the soil during the process of reforestation, not the more delicate, less competitive herbs and grasses of the old meadowland. Again, no tractors can usually be involved in this process because of the risk of soil compaction, so mowing has to occur by string trimmer or even scythe, and the hay needs to transported out by hand on special stretchers. The first couple of years, this mowing processes needs to be intensive to fight back resilient herbs and shrubs such as brambles and bracken, and even once they have gone, meadows need to be mown at least once a year in order not to let it turn into a forest again. A break in mowing can mean that the work of many years is lost. All of this needs to be done respecting the seasons and the life-cycles of the species affected by the process.

Restorationists do all of this work without any guarantee that their restoration process will be successful. Usually, some typical meadow plants will return after a restoration process, but in a lot of cases the most highly prized, really rare species do not return. Many typical meadow orchids, for instance, are picky about growing conditions, and despite the best of care, they often do not return to restored areas. In some cases, the non-returning species simply cannot return because they have no viable seeds in the remaining seedbank, or because the nearest existing populations are too far removed to be able to disperse naturally to the restored areas. In such cases, many restorationists, at least in Europe, do nothing except for maintaining the restored old meadows, in the hope that 1 day, maybe, luck will come their way and the lost species will return. What else could they do?

7.3 Being Rational About Reintroductions

According to Joachim Mergeay and Luc De Meester (2010), restorationists can do much more than simply keep up traditional management practices in the hope of a miraculous return of lost species. They claim that waiting for the spontaneous colonization of target species is in many instances a form of eco-masochism (p. 126). In order to save the rarest and most endangered species, we need to work on habitat restoration, increase the connectivity between habitats and increase population sizes. But achieving those goals is a very long-term process, and many of the rarest species no longer have long-term prospects. Moreover, according to Mergeay and De Meester, there are “priority effects” to take into account: newly restored areas can get colonized by opportunistic species already present in the vicinity, making the restored areas unsuitable for the resettlement of target species for long stretches of time, sometimes even permanently. Given the fact that the most endangered species only exist in small, isolated populations, they are least likely to be able to quickly resettle newly restored areas, and are thus most likely to fall victim to priority effects.

Given these circumstances, one should, according to Mergeay and De Meester, consider actively reintroducing missing target species to restoration areas, so they can gain a foothold before the opportunists arrive. Mergeay and De Meester note

however that there is still a taboo on actively reintroducing target species as part of a restoration process. That taboo is often justified on the basis of the fact that nature conservation should primarily be directed at letting spontaneous natural processes run as freely as possible. But, Mergeay and De Meester note, that justification is inconsistent. European nature is a humanly mediated nature to start with, and restoring it will always entail further human mediation. How can one judge that actively reintroducing species is "too unnatural", but for instance mowing a meadow is not? It seems that the difference made between active reintroduction and mowing a meadow is purely arbitrary, a question of sentiment. Nature conservation is not served by sentimentality, indeed, sentimentality about spontaneous processes can be dangerous when it leads to the disappearance of rare species. Therefore, they propose to tackle the taboo on reintroductions on a rational basis.

7.4 Biodiversity as Pandora's Box

According to Meregay and De Meester, the taboo on reintroductions is based on a confusion between means and ends. The end of conservation should be the conservation of biodiversity. To achieve that end conservationists can use any number of means, one of which is letting spontaneous natural processes occur. If however the target species of a restoration project does not spontaneously recolonize a restored area, one should consider actively reintroducing it. Holding on to the primacy of spontaneous processes is in such a case confusing means and ends: the end is the conservation of biodiversity, the means are spontaneous processes. Means should be judged solely on the efficiency with which they achieve the desired ends, and if they prove to be inefficient, they should be replaced by more efficient ones.

Mergeay and De Meester's argument is well taken: if the final goal of all conservation is in essence the conservation of biodiversity, then it is not clear why we should be so concerned with allowing for spontaneous processes. Indeed, the problem is that once one accepts that biodiversity conservation is the absolute goal of nature conservation, Pandora's Box is opened. Biodiversity is, at least according to one standard definition, nothing more than the variety of genes, species and ecosystems. "Spontaneous natural processes" as such are no part of biodiversity: they might give rise to biodiversity, but not necessarily so. If one wants to conserve biodiversity, one therefore does not necessarily have to bother with spontaneous natural processes. Genes can be stored in gene banks, and increasingly, humans can create diverse genetic lines themselves. Species can be just as well preserved in botanical gardens and zoo's as they can be in wildernesses. Ecosystems that support diverse gene pools and species can be ones that are influenced, manipulated or even created by humans. Moreover, the goal of biodiversity conservation will sometimes force humans to intervene and manage when species, gene pools or ecosystems are under threat, such as when we are forced to reintroduce species to avoid "priority effects" in restored areas.[9] As a result, one could even envisage a totally managed world in

[9] Kate Rawles (2004) remarks that the biodiversity concept indeed seems inherently managerial.

which there is no threat of biodiversity loss but where there is no longer any room for spontaneous natural processes.

Such a totally managed world is not however what conservationists are after (see Drenthen 2005). Conservationists are also concerned with spontaneous natural processes. Even Mergeay and De Meester (2010, 127) have to concede that. In the conclusion of their paper, they mention that although they believe that there is a good case to be made against the taboo on reintroductions, one should also try to avoid too much "gardening" in nature reserves. Yes, it is all about biodiversity, but only biodiversity begotten *as naturally as possible*. Spontaneous natural processes can never be a mere means: it is the *preferred* means, and sometimes they are an end in itself. The clear distinction Mergeay and De Meester wanted to draw between means and ends, appears not to be so clear after all, and in the end Mergeay and De Meester are faced with the same kind of inconsistency they reproach the adversaries of introductions: they arbitrarily introduce the concept of nature in order to ban certain conservation practices. Arbitrarily, because on the one hand they have no problem with interfering with nature when it comes to traditional management and reintroductions and on the other hand the importance attached to nature as an evaluative criterion to ban certain conservation practices cannot be deduced from the overall goal of conservation: the conservation of biodiversity. If conservation is only about biodiversity conservation, there is no a priori reason why we should care about spontaneous natural processes.

So, there seems to be something unassailable about the importance attached to spontaneous natural processes, even in an attempt to downplay that importance. There is something about human mediation and manipulation of nature that bugs us. But why is that? What could it mean to use "naturalness" as an evaluative norm in a context of a thoroughly humanly mediated nature? Why should we value "naturalness" in the first place, or more saliently, why should it be a concern in any conservation effort? Can invoking "naturalness" as an evaluative criterion in Old World conservation be anything else than arbitrary? Maybe it is best to start looking for answers in New World environmental philosophy, as it is there that spontaneous nature, or a nature untouched by human hand, takes center stage. And were better to look than in the work of Eric Katz, where the spontaneity of nature plays a key role.

7.5 Katz and the Domination Over Nature

Eric Katz is probably best known for his sustained attack against the acceptance of restored nature as real nature. According to Katz (1997, 95), nature restorations are all about remolding nature to better suit human satisfactions and interests. When we engage in nature restoration or management, we reconstruct: "the natural world in our own image, to suit our purposes", (ibid., 115) whereby we: "manipulate natural processes to create the most pleasant human experience possible" (ibid., 114). In doing so, we are making nature into an artifact, and artifacts are: "as human instruments […] always a *means* to the furtherance of some human *end*" (ibid., 129). That "human end" which restorations serve is, according to Katz: "the creation of

environments that are pleasing to the human population" (ibid., 101), and to create environments that: "provide us the pleasant illusory appearance of the natural environment" (ibid., 105). In others words, a restored natural area is not nature at all, it is an artifact that gratifies our need for a pleasurable nature experience. In nature restorations, nature is instrumentalized to serve human purposes.

Why is such an instrumentalization problematic? Katz gives two distinct answers. First: "what makes the value of the artificially restored natural environment questionable is its ostensible claim to be original" (ibid., 114). Here, Katz stays close to that other great adversary of nature restoration, Robert Elliot (1982, 1997): restored nature is faked nature, it passes artifacts off as nature, and that is deceitful. Second, Katz believes that in instrumentalizing nature we deny its autonomy. Nature is not created to fulfill any human purpose, indeed, it is "intrinsically functionless", meaning that "[it is] not created for any particular purpose; [it has] no set manner of use" (Katz 1997, 114). Furthermore: "nature is not merely the object of technological practice and alteration; it is also a subject, with its own process and history independent of human intervention and activity" (ibid., 115–116). Nature thus has autonomy: it has its own trajectory of development quite distinct from human purposefulness. Therefore, following a broadly Kantian line, nature should be seen as an autonomous entity that should never be treated as a mere end to further certain human goals. Denying nature its autonomy through instrumentalizing it in order to attain human goals is therefore a form of domination. Both humans and nature are partners "in the continuous struggle for the preservation of autonomy, freedom and integrity" (ibid., 117), and because we are shared partners on this project, humans have an obligation to preserve and protect the natural world.

7.6 The Externality of the Object of Desire

According to Katz, the problem with nature restorations is that it makes nature solely answerable to our desires, whereby nature is relegated to an artificial means to satisfy those desires. There is a good deal to say about that conclusion: nature restorations can result in the instrumentalization of nature, and this danger becomes acute when it is believed that the goal of all restoration efforts should be defined in the general terms of biodiversity conservation. Later, I will return to this point. However, I want to argue contra Katz that the desire to restore nature itself already contains a rejection of the instrumentalization of nature. This rejection is not based on the specific ontological status of the object of that desire (the autonomy of nature), but with the structure of the desire itself.[10]

In Katz's view, all nature restorations are primarily manipulative in character. His theory seems to imply that the restorationist first forms himself an internal image of what a pleasurable nature experience is like, and then sets out to manipulate

[10] For the argument developed in this section, I am greatly indebted to the work of Burms and De Dijn (1995), especially chapter 1.

nature in such a way that it will generate precisely those experiences. But it seems to me that *experiences* of nature are not what restorationists are after, they are after the genuine article: *nature*. This is of course precisely the point Robert Elliot raised in his famous article and later book *Faking Nature*. Elliot argues that for someone who is interested in nature it is not enough that a putatively natural area is *experienced* as being natural. Nature is of value for a nature enthusiast not because of the states of mind that are engendered by experiencing nature, but because of what it is: nature. We do not just want any experience: we want to "world to be a certain way" so that we can have "veridical" experiences (Elliot 1982, 91).

Elliot intuitively proves this point by a set of three well-known thought experiments about a wilderness enthusiast called John, of which I will only discuss the first. In it, John falls into the hands of a "utilitarian minded supertechnologist". By means of an experience machine he is given the wilderness experience of a lifetime. After John is told that it was all a "cruel hoax", he however feels cheated. This thought experiment shows that John is not interested in experiences of nature per se, but that through his experiences he wants to be in the presence of, wants to get into contact with, the reality which he most values: nature. He shows that he is prepared to sacrifice the knowledge and memory of his sensational wilderness experience while hooked up to the experience machine because it turned out that it did not occur in the presence of real wilderness, although the experiences themselves were at that time indistinguishable from experiences he might have had when he would have been in the presence of real wilderness. If one thus values nature, and seeks to be in its presence, this is not only because of the experiences one expects to get from it, one wants to get through to its *reality*, one wants *reality* to be a certain way, and one *wants to be in the presence* of that reality. As a consequence, we cannot see that reality as a mere instrument to give us those experiences. That which we value is precisely transcendent vis-à-vis our experiences: we go searching for it even beyond whatever experiences we expect to get from it.

With Katz I agree there is a problem with the instrumentalization of nature, but against Katz I do not believe this problem to be the result of the specific ontological properties nature has. All acts of conservation are a response to a prior appeal from nature: nature makes an appeal on us, appears as something of great meaning, installing in us a desire to be in its presence. It belongs to the structure of the desire generated by the appeal from nature itself that we do not want to instrumentalize the object of that desire. We want to be in the presence of the object itself and treating it as a mere means would imply that we would only desire some experiences or products by means of that object. We would then be able to discard the object of our desire if we were to find means that achieve this goal more efficiently. In such a case the object itself in its concrete thereness has no value of its own, we will "look through it" to achieve some other goal, while in fact it should be the source and focus of our desire.

The desire to be in the presence of nature, to want to conserve the presence of nature, thus starts with a moment of passivity in front of nature in which nature makes an appeal on us as a source of meaning or value which needs to be respected and honored in its own right. Nature itself appears as the transcendent source of our

desires, and conservation is all about respecting nature as a source of those desires. There is no fundamental difference here between preservation and restoration: both start from this prior moment of passivity in front of nature. It is only when one is first struck by the appeal that comes from nature itself that one can desire to restore or preserve it. For both nature restoration and nature preservation, respecting nature then entails respecting its transcendence. In both practices nature must remain fundamentally external to our desires, guard a certain independence vis-à-vis our desires as their transcendent source, in order to be able to satisfy the kind of desire that is generated by it.

In conservation, nature should thus not be seen as an instrument to satisfy certain desires we can specify independently from the concrete way in which nature presents itself to us. That is however precisely what Mergeay and De Meester propose to do. Mergeay and De Meester believe, together with a growing group of conservationists, that conservation should all be about biodiversity. Nature conservation is then no longer about respecting nature as the transcendent source of our desires, but about (re)constructing nature in such a way that it complies with our desires. Nature can and should be so reconstructed that it satisfies our desire to maintain levels of biodiversity. Consequently, Mergeay and De Meester fall into the restoration trap described by Katz: by specifying a goal for conservation which is independent from the concrete way in which nature manifests itself they open the door for the reconstructing nature in such a way that it complies with the goal we have in mind for it, thereby relegating nature to the status of a mere means to satisfy our desires. What starts as an attempt to conserve nature thus ends up with negating the importance of nature altogether.

The problem is however not that in doing so we make nature into an artifact and that non-artificial nature (or "intrinsically functionless nature" in the words of Katz) represents a special type of value. The problem is that the appeal nature makes on us is to be respected in its own right, and this appeal cannot be answered in merely manipulative terms. The task of all conservation, whether it is restoration or preservation, is therefore not primarily to manipulate nature, but rather to interpret nature in such a way that we can attain a fitting attitude towards the appeal it makes on us. Nature restoration efforts as well as nature preservation efforts thus have a primarily interpretative rather than manipulative character.

7.7 The Strongly Embodied Meaning of Nature

The insight that conservation efforts are driven by an appeal made by nature itself hangs together with the idea that the meaning nature has for us is strongly embodied. One can speak of strongly embodied meanings when the medium through which meaning is conveyed is itself constitutive of the meaning that is conveyed. A good example of a strongly embodied meaning is a poem.[11] A paraphrase of the

[11] I take this example from Arnold Burms (2011, 142–146).

meaning of a poem can never capture its full meaning. If we were to try and explain what that full meaning is, we can only direct the attention back upon the concrete wording of the poem itself, because its meaning is tied up with the specific words of the poem in a specific order. If we change those words, we necessarily change the meaning of the poem. That is of course why it is so hard, if possible at all, to translate poetry without changing, however slightly, it's meaning. It is also why a poem points to a meaning beyond itself precisely by attracting the attention onto itself. The more the concrete wording of a poem becomes unique and unsubstitutable, the more it thus fixes the attention upon itself, the more it points to a meaning beyond itself.

It is my contention that the meaning of nature is similarly strongly embodied. Whatever meaning nature has cannot be grasped but through its concrete, material manifestations. It is precisely the very idea that the meaning of nature is embodied in its concrete manifestations that is denied when conservation is made to serve certain abstract goals, such as the maintenance of biodiversity, or, indeed, some abstract notion of nature's ontological structure. Nature conservation does not concern itself with conserving Nature or Biodiversity, nature conservation is always a response to the appeal from this or that particular piece of nature. Particular natural areas, or indeed species or natural events such as the changing of the seasons or big thunderstorms, sometimes appear as a meaningful unity, a unity that seems to reveal something of the essence of nature. Such units in there concreteness seem to point beyond themselves to some deeper truth or insight. Conservation is a then an attempt to keep the meaning these natural objects presence present. Since that meaning can only be experienced through the concrete materiality of those natural objects, keeping that meaning present entails keeping those objects the way they are.

Such natural objects can be properly called symbols of nature. They are not symbols because they express the meaning nature has for us in the best or most efficient way. Since the meaning of nature can only be fathomed through these particular symbols, we cannot deduce from the meaning nature might have what symbols would be best or most efficient to communicate that meaning. We can only grasp the meaning of nature by directing our attention back upon the concrete materiality of these symbols. An example of such a symbol can be found in the work of Aldo Leopold's *A Sand County Almanac*.[12] In the chapter *Marshland Elegy* Leopold describes the crane as "the symbol of our untamable past", which grants a marsh "a paleontological patent of nobility" (Leopold 2001, 160). If the crane is absent from a marsh, it is as if it gets grief-stricken: "[the] sadness discernable in some marshes arises, perhaps, from their once having harbored cranes" (ibid.). It is as if the crane is uniquely capable of capturing the meaning of the marsh, granting it nobility. The crane evokes a "world of meaning", the meaning of the marsh, and that meaning is lost if the crane disappears: the marsh forever seems dismembered, its meaning disfigured, even if in all other respects the marsh stays exactly the same. The more

[12] My attention was drawn to this example through the reading of James (2009, 83–85). Although my treatment of the symbolic stays very close to his, I stress the importance and consequences of the material embodiment of meanings somewhat more forcefully.

the crane in all its particularity becomes unsubstitutable, the stronger it evokes the world of meaning of the marsh: "when we hear its call, we hear no mere bird" (ibid.). But it is only by listening attentively to the crane's call that we can sense we are hearing more than just a crane signaling its presence.

7.8 The Importance and the Danger of Permanence

Leopold' example of the crane also draws our attention to a further fact. If our desire to conserve nature is a desire to conserve the meaning which reveals itself through strongly embodied symbols, that appeal will be stronger the more we can see, in the words of Arnold Burms, these symbols "as the expression of a certain permanence which transcends the accidentalness of fleeting desires and ambitions. In what strikes us as really important, 'the past and forever' sounds" (Burms 2008, 328, translation by author). The oldest, most permanent will thus appear to have the greatest meaning, seem the weightiest. I believe that the whole Midas complex which plagues environmental philosophy when it comes to "human modification" of nature boils down to a misunderstanding of this fact. If nature appears meaningful it must be able to be seen as the expression of a sort of permanence or endurance through time. This permanence is seemingly under threat when nature is made the object of "fleeting desires and ambitions" of humans. Nature, left to its own devices, seems to have a kind of permanence; it seems to transcend the fleeting coincidences of time, if only because the timescales on which it changes far transcend habitual human perception of time, or because its changes appear to be eternally cyclical. If the outlook a particular natural area or the form of a landscape is however seen as the contingent result of certain human practices, nature seemingly becomes the result of the passing, vain and short lived ambitions and projects of humans. The transcendence of nature thus seems jeopardized when nature is seen as the result of the "momentary desires and ambitions" of humans and in an attempt to shield the transcendence of nature preservationists want to purge it from and protect it against all human influence.[13]

What is however crucial to understand is that the appeal that comes from nature does not come from it "not being modified by human hand" itself, but from its permanence through the passage of time (see Munnik 2003).[14] Here, restoration and preservation find common ground again: they both are directed at ensuring the continuity of the meanings embodied in certain particular natural areas, and those areas

[13] Although I cannot develop this point here, I believe that a similar drive lies at the heart of rewilding projects in Europe. It is not because the presumed "wild" landscapes are more originary, or richer, that they are more valuable, but simply because they seem to have more of an air of permanence (see Munnik 2003).

[14] In many ways, the position for which I am arguing is close to that worked out in Holland et al. (2008), but it would take a new article to sketch the differences between my position and theirs. However, what is clear is that I put a far greater stress on the crucial role material continuity plays in the preservation of meaning than do Holland et al. (2008).

have gathered "weight" through their permanence. It is simply not the case that landscapes which have been modified by humans in the past cannot be seen as possessing a certain type of permanence: the pre-industrial European agricultural landscape had a high degree of stability and permanence, even when it changed under new agricultural practices it usually retained features of older forms and practices. It also explains why, even if we have to swallow some initial disappointment, the landscapes of the great North American national parks do not seem to decrease in value now we come to know that some of their most beautiful landscapes are at least partially the result of First Nation burning practices. Such landscapes can still be venerated in their seeming timelessness, and it is this timelessness, this permanence, which speaks to our imagination and strengthens the appeal they make on us. A landscape gathers, as it were, meaning over the passage of time through its enduring material presence.[15]

The idea that the meaning we try to conserve through nature conservation practices is embodied in particular material manifestations of nature however also entails that the meaning we seek to preserve is subject to transformations beyond our control. If meaning is tied to a concrete material form, certain changes to that materiality will necessarily affect its meaning. Of course nature is changeable, and not all of the changes nature undergoes are desirable for a conservationist. Such changes might even ultimately destroy all meaning we perceived in a particular natural area. Nature conservation is also about preventing such changes from happening. In this sense, no act of conservation can do without at least a minimum of manipulation.

That there is some manipulation of nature needed is of course clear in restoration efforts. If we do not mow the heath in the Low Countries, it will return to scrubland and eventually forest. Yet such mowing is, as I have tried to show, not directed at recreating nature along the blueprint of some idea of what nature should be like. It is about the interpretation of and the respect for the way in which nature concretely manifests itself in a particular area and about conserving the meaning it conveys. It is about carefully "reading" a particular natural area and seeing how we can enable it to continue its "story", how we can let it continue to "speak" to us. In restoration, nature is thus not made subservient to our ideas or desires any more than it is in preservation. From its side, a preservation effort cannot escape manipulating the natural areas it wants to preserve either. Minimally, strict preservation entails the erecting and patrolling of borders in order to keep human intrusion to a minimum, but usually even the strictest of preserves undergo far greater manipulation. That is why Bernard Williams (1995, 240) rightfully claims that: "anything we leave untouched we have already touched. It will no doubt be best for us not to forget this, if we are to avoid self-deception and eventual despair."

[15] This of course also entails that in our present society, when landscapes are arranged and rearranged on a rhythm dictated by a global market fueled by our fleeting desires, the capacity of landscape to gather meaning and appeal through their enduring presence over time, is greatly diminished.

It is however clear that this manipulation cannot go too far: as we have seen, the object of our desire must remain external to our desires. Paradoxically, if we are really interested in conserving nature, we must also be interested in the fact that it will not respond to our conservation efforts, that it will negate our desires. It belongs to the structure of the desire itself that the object of the desire remains recalcitrant to our desires, and thus the possibility of the object not meeting our desires must be a real possibility. Nature conservation efforts will thus always have to operate in a tension between the two poles of manipulating nature to in order to preserve its meaningfulness and giving way to spontaneous processes. Both exerting too much manipulative control over and completely giving in to the unpredictable transformation the materiality of nature is subject to, might eventually destroy the meaning we sought to conserve. We do not however have any direct control over this tension. It is therefore impossible to determine in general how much manipulation and how much surrender to the spontaneous transformation are needed in order for a conservation effort to be successful.

7.9 The Taboo on Reintroductions Revisited

This last point brings us back to Mergeay and De Meester and the irrationality of the taboo on introductions of target species. According to them, the taboo on introductions is irrational because it is inconsistent, allowing for some forms of human manipulation and prohibiting others. We can now however interpret the taboo in another light. Nature conservation is all about enduring the tension between too much and too little manipulative control. But we cannot actively control that tension itself: there is no general goal outside of conservation to which the rightness of certain conservation practices can be measured. Precisely because in conservation we must give over to something over which we have no control, because we cannot deduce from any general principal what we must do to strike the right balance in the tension between too much and too little manipulation, the rules around conservation will necessarily have an arbitrary character, in the sense that they will not be able to be deduced from some general goal which conservation should attain, and will always be tied to a specific (cultural) tradition of conservation. In this respect, conservation is like playing a game: the finality of the game cannot be sought outside of the game; its rules are not deduced from a separate finality the attainment of which the game itself is but a substitutable means. The rules themselves constitute the finality of the game, and its meaning can only be understood by playing it, by adhering to its arbitrary rules.

Contrary to what Mergeay and De Meester believe, the taboo on reintroductions is not founded upon an inconsistent deduction from the general principle that nature conservation should be about allowing for spontaneous processes. Indeed, the taboo is arbitrary, and has no rational justification, but it is necessarily so. The alternative, which Mergeay and De Meester propose, is that we do make nature conservation subservient to some general goal, namely biodiversity conservation. But in such a case, we have no reason to bother with nature; it will no longer be clear why we should have any respect for nature at all. If Mergeay and De Meester want to avoid

the conclusion that nature conservation is not about respecting nature itself, they will have to, as we have seen, eventually install new rules that will be every bit as arbitrary as the ones they reject on the basis of their arbitrariness.

7.10 Conclusion

We started this paper by remarking that there are differences in sensitivity about the role of humans in conservation between the Old and the New World. Central to both conservation traditions however stood unease about the role of the concept of the "natural" or "wilderness" as an evaluative norm for conservation practices. What I have tried to show is how the concept of the "natural" functions in those debates. It is mistake to believe that "the natural" simply refers to things that are "not modified by human hand" or "things that are intrinsically functionless". When one evokes "the natural" as an evaluative concept in conservation efforts, one tacitly refers to the insight that the type of desire we have for nature cannot be satisfied when nature is brought under our total manipulative control, not because of the specific ontological structure of nature, but because of the type of desire we have for it. There is no essential difference between the practices of nature preservation or restoration here: neither nature restoration nor preservation efforts can succeed through instrumentalizing whatever they wish to restore or preserve.

I also tried to show how it is a mistake to claim that conservationists who use "naturalness" as an evaluative norm are inconsistent in their reasoning. If nature conservation is about conserving strongly embodied meanings, than conservation practices cannot be interpreted as being directed at achieving some general goal of which particular natural areas are mere manifestations. Nature conservations is not about manipulating nature in such a way that it better suits the images we have of it: it is a response to an appeal from a particular piece of nature. Conservation therefore should always start with an attentive interpretation of that appeal.

Finally, I tried to show that if nature conservation is about conserving strongly embodied meanings, those meanings that seem the most permanent will have the greatest appeal. When confronted with an age-old landscape, it is thus not because it is the most original or the least humanly influenced that we seem to value it the most, but the fact that it transcends the passage of time, that it has the patent of permanence. Seen from this light, the search for an origin, an origin in which nature appears to be the most pure and thus most valuable, is an illusion. Nature gathers value, "weight" or meaning not by being pure or originary, but through endurance.

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Chapter 8
Seeking Nature's Permission

Alan Holland

The kiss of the sun for pardon
The song of the birds for mirth
One is nearer God's heart in a garden
Than anywhere else on earth

(From *God's Garden*, by Dorothy Frances Gurney)

8.1 Introduction

Buttons and socks, hearts and minds, momentum, control, track, nerve, face and plot, even worlds and empires are, all of them, things we can be said to "lose". But to lose a garden appears something of an anomaly. Nevertheless, that is how the gardens at Heligan in Cornwall (UK) were popularly described – as "lost". And the reclamation of these "lost" gardens was hailed by the London *Times* as "the garden restoration of the century" (Smit 2008, 3). Since then, Heligan has been voted "the Nation's favourite garden" by BBC *Gardeners' World* readers and viewers (ibid., 75). Clearly we have here a garden with iconic or exemplary status – fit therefore to count as an illustration of what David Cooper refers to in his book *The Philosophy of Gardens* as "The Garden" (Cooper 2006, 124).

Already these remarks prompt questions of the usual kind: what counts as restoration, what conditions have to obtain for a "restoration" project to be thought appropriate, and why is restoration as such desirable? In other cases, restored landscapes are thought of as having been damaged or even destroyed, which makes the case for restoration, or even reparation, seem fairly clear. But the case of Heligan appears at once to be different. Heligan was simply "lost". And the more

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one thinks about it, the more it seems therefore to pose something of a conundrum. In the face of any kind of damage or destruction, action to repair such damage appears self-evidently commendable. But in the case of Heligan, exactly those processes that constituted the "loss" – the encroaching bramble, ivy and laurel, the selfset trees and so forth – can be seen from another perspective to constitute nothing less than the "self-restoration" of nature – often indeed reckoned to be the most desirable kind of restoration. Hence, to reclaim the gardens seems to fly in the face of nature's own "healing" processes. We appear to have a clear-cut conflict on our hands.

"All praise of civilization, or art, or contrivance", writes John Stuart Mill, catching the sense of opposition alluded to here, "is so much dispraise of nature" (Mill 1874, 21). I want to argue that Mill is wrong. For before taking the notion of conflict too seriously we should notice, first, that nature's "take-over" of the garden was decidedly gentle. If this was "lost" property then nature had kept it in a state that certainly "permitted" us to reclaim it. And the reason for this, I suggest, goes back to the principles that were followed in the development of the original garden. Basically, those who made this garden "sought nature's permission" for what they did.

A more familiar way of making the point is, perhaps, to say, that they "respected" nature. More familiar, maybe, but not very informative. Henry Salt (1928, 78) reports how "one of the shrewdest and most honest of politicians, Sir Henry Campbell-Bannerman [British Prime Minister, 1905–1908], was accustomed, when he returned home after an absence of any length, to visit certain favourite trees in his park and gravely raise his hat to them in salutation." One is moved to ask: if we are to respect nature, should we, or should we not, take off our hats? The notion of "seeking nature's permission" that I wish to invoke, on the other hand, involves altogether more active forms of engagement with nature.

To return now to Mill, I want to argue, further, that the reason why he can only see an opposition between "contrivance" and nature is that he failed to notice that there is a sense of the term "nature" that is different from the ones that he identifies in his essay on nature. This is the sense of "nature" that provides a contrast with that of the "unnatural". Thus, in the course of this essay, we shall also be attempting our own piece of "conceptual" reclamation – the reclaiming of the concept of the unnatural as a meaningful term of critical appraisal. Availing ourselves of this concept, we shall be able to say that contrivance, including all the "artificial" practices found in gardening, can be described either as natural or as unnatural, which in turn allows for the possibility of identifying, and perhaps commending, those practices that cleave to the "natural", as contrasted with "unnatural". An alternative way of referring to these practices might be to describe them as conforming with nature's "customs".

In addition, I shall try to show that practices that conform with nature's customs, in this sense, constitute the most meaningful of our engagements with nature, and on that account contribute to the living of a worthwhile life. And finally, in a concluding homage to the theme of this anthology, I claim to discern, on the basis of the preceding reflections, one important way in which old world and new world perspectives can be said to differ.

8.2 The Heligan Project

Heligan is not, as such, a restoration project, but rather, a process of reclamation. As Tim Smit, who was the chief architect of the reclamation writes: "Heligan's importance to me lies not in its faithful recreation of the past, but in the relevance of its past to the future" (Smit 2000, 241). The emphasis is not on restoring what once worked but on reclaiming what once worked and still works. A good example is the hydraulic ram, a masterpiece of Victorian engineering that was capable of pumping water to a height of 100 m to fill a reservoir that became the water supply for both house and garden. This is once more now fully operational.

The foundations of the garden, its shelter belts, rides and walled gardens were laid by The Rev'd Henry Hawkins Tremayne in the late eighteenth century. Various of his descendants were responsible for additions such as the large scale planting of exotic specimens, the "Jungle" and the Alpine and Italian gardens. In many ways, Heligan was not at all unique among English country houses; the layout of its gardens, its plantings, its wealth, its labour force, could be replicated up and down the land. The house itself, indeed, has been described as "quite plain" and as having "very little that is either striking or beautiful about it" (Smit 2008, 16). Yet, as remarked earlier, the gardens, now separated from the house and taking on a life of their own, currently enjoy something approaching iconic status. No doubt this is due in part to the romance of their "restoration". But at the same time, few other grand houses would have benefited, as Heligan has done, from being in the possession of three or four successive generations of enthusiastic (or as one author describes them "ardent") horticulturalists. Equally important, perhaps, few others will have enjoyed such loyalty from generations of both tenants and labour force, as a speech made by John Tremayne senior at his son John C. L. Tremayne's coming of age testifies: "I see before me men whom I have known as tenants of my estates as long as I have been the possessor of them. I see the sons and grandsons of men whom I remember as tenants of these estates"; or again: "Many of [the workmen present] are the sons and grandsons of men whom I remember working on this estate when I was a boy. Many of them are now of course … grey of head, whom I remember strong, and lusty, and cheery boys" (Smit 2008, 14). But the loyalty was to have tragic consequences: for the start of the decline and eventual abandonment of the gardens can be dated precisely to the period of the "great war", wherein more than half of the workforce was to perish. Thus was the stage set for the reclamation of these gardens when, on February 16th 1990, Tim Smit with John Willis, a Tremayne descendant, first entered them.

The reclamation of Heligan was possible, I suggest, precisely because most of what was originally attempted was done "with nature's permission". This is evidenced by the very fact that its structures and especially its plantings mostly survived the period of nature's interregnum. But Heligan is no natural garden, as this term might normally be interpreted. True, it has a "wildlife" area, but this is (aptly) labelled "the jungle" and contains many of the "exotic" plants that you would expect to find in a tropical jungle rather than in the temperate climate of England. Rather, to say that the garden was constructed "with nature's permission" is to imagine its

construction taking the form of a "conversation" with nature. "If we plant shelter belts, supply water, build walls, lay down manure trenches – and work our socks off – what will you permit us to grow?" The answer came back loud and clear: "In addition to your native vegetation – camellias, rhododendrons and the like – you can have, in your warm, damp valley, a series of microclimates that will permit a whole array of "exotic" vegetation to flourish – pineapples, melons, tree ferns, kiwi fruit, and much else besides."

This is the tradition that has been continued following the rediscovery of the garden – and not least in respect to the hard work, for the gardening tasks are carried out in as labour intensive a fashion as they ever were: "It is still all deliberately "labour intensive"", writes Candy Smit; "We have undertaken not only a structural restoration but a return to past practice, embraced by the workplace of our forefathers. There is a tangible sense we can still learn from them" (Smit 2008, 4). It has been continued, too, in the very process of reclamation. Candy Smit again: "As the clearance proceeded and treasures continued to emerge, we became aware that the very ground itself spoke of tragic loss; caution and respect were the silent order of every waking hour, every conversation, every sweep of the scythe or footstep into the unknown" (ibid., 3) A particularly striking, if poignant, demonstration of the fruits of this approach was the discovery of a set of signatures on the lime plaster wall of the old garden toilet (the "thunderbox room"), then reduced almost to rubble, and below them the date "August 1914" (ibid., 4).

8.3 Seeking Permission Through Active Engagement

Both in general conception, then, and in practice, I am suggesting, the lost gardens of Heligan were continually being referred to nature for "permission", and are continuing to be so. But now, broadening the scope of our inquiry, I want to argue that the point applies to gardening practice generally, and in a quite down to earth sense – especially when the gardening is done in a labour intensive manner, as is, and was, the case at Heligan. In brief, and as the following considerations are intended to suggest, it is through active and attentive engagement, rather than through keeping our distance, that we can learn how to live in and with nature, hope to obtain nature's permission for our interventions, and in the process come to know better what it is to show nature due respect.

First, there is no better way to gain access to nature than through the conversation with nature that epitomises best gardening practice. I have in mind the way in which active engagement can function as an unparalleled point of entry to the natural world, by providing opportunities for encounter, and sometimes surprise encounter, which are so important for both understanding and motivation. It is hard to think of any other form of engagement with nature that affords us such a comprehensive and visceral appreciation of the seasons, for example, and of the elements of our environment as the ancients knew them – earth, air, fire and water. It is equally hard to think of any other form of engagement that affords us such a close-up and personal view of the habits, behaviours and stratagems of both animals and plants.

There is indeed one other parallel, and it is an instructive one: the case of Darwin. For mention of the habits, behaviours and stratagems of animals and plants forcibly brings to mind his work on such subjects as climbing plants, orchids and worms. Of course he relied on input provided by others, but insofar as these were the results of his own labours, he resembles no one so much as the gardener in the practised watchfulness with which he collected his data. Whether recording the times taken for the tendrils of *passiflora gracilis* or *passiflora punctata* to do a complete circuit, examining the singular method by which the five species of the orchid *catasetum* are fertilised, or the manner in which earthworms take hold of the leaves which they then drag down into their burrows for the purpose of plugging the entrance, he was on his knees, often literally but also metaphorically (Darwin 1877, 178–208, 1904, 52–93, 1906, 153–154, 156–157). One can readily imagine a Darwin who had been more interested in his gardening than in his barnacles producing equally informative monographs, for example, on the root behaviour of dandelions, dock, ground elder, couch grass and mare's tail. Again as already mentioned, and as is well known, he drew heavily, for his existing work, on information that was in fact supplied by gardeners, pigeon fanciers and other practitioners of attentive engagement with nature.

Second, and so far as our understanding of the natural world is concerned, there can be no better training ground than gardening, or horticulture and forestry more generally. The trees themselves have preferences for the hot or the cold, the wet or the dry, and because they are long-lived are a living record of the patterns of hot, cold, wet and dry that have assailed our planet over the centuries, and of much else besides. One thinks of Aldo Leopold's February entry to his Sand County Almanac, which has his saw "biting its way, stroke by stroke, decade by decade, into the chronology of a lifetime, written in concentric annual rings of good oak" (Leopold 1989, 9).

But the crops in themselves, from the mighty oak to the lowly radish, provide but a small part of this education. Equally important, if not more so, is the understanding that we gain of the many species that pose a threat to those plants we tend (and intend) as crops, namely the so-called "weed" species. We even learn to admire their tenacity, their persistence – their invincibility. And this is not yet to mention the unparalleled insights that gardening also provides into the insect world – again, often by virtue of the threat that they pose to our crops. Slug and snail, centipede and millipede, wasp, bee and hoverfly – we learn quickly to differentiate "friend" from "foe", we learn their habits, we learn their strengths and their vulnerabilities. It is a veritable battle of wits, with no clear winners.

True, we speak here for the most part of cultivated plants, and of animals to be found in this cultivated setting. Some philosophers would infer, therefore, that they can have little to teach us about the "natural world". But this would be a mistake.

A first, quick, retort would be to say: in any sense that matters, the slug is as wild as the rhinoceros. A more considered response is to say that at the very least the objection appears to overlook the fact that whatever is in fact "natural", or has in fact happened "naturally", is only one from among an indefinite number of the possibilities that evolution presents. As Andrew Brennan (1988, 49–50) puts it, drawing on the work of G. E. Hutchinson: "The realised niche [of an organism] will occupy a considerably smaller volume in hyperspace [i.e. the dimensions of an

organism's viability] than the theoretical, fundamental one." Thus, the properties, capacities and aptitudes that humans have selected for, were there in the first place and in principle to be selected. It is not unreasonable, therefore, to look upon both domesticated animals and cultivated plants as realisations of "possible natures". In this connection it is of some interest to consult an article on the Heligan gardens that appeared in *The Gardeners' Chronicle* on December 19th 1896 (Smit 2008, 16–19). The author there describes how *Cornus capitata*, a native of Nepal, "grew and thrived amazingly" in the "genial soil and climate of Heligan". Regarding the rhododendrons of the Sikkim Himalayas he notes that as a result of their "careful and intelligent culture in an entirely congenial habitat", the flowers of those at Heligan are "in nearly every instance finer and the colours more brilliant" than those depicted in the plates of Sir Joseph Hooker's "splendid" folio (i.e. of the same plants in their "native" setting). And whereas R. Thomsoni is described by Hooker in its native habitat as a bush ranging from 6 to 10 ft high, "or in damp woods 15 ft high, but then spare and woody", the specimen at Heligan reaches 25 ft "without being either spare or woody".

There might well remain a residual concern of the kind that Eric Katz (1997, 93–107, especially 105) has eloquently expressed – that in the cultivated setting the "autonomy" of nature is somehow compromised. Hence in all honesty we cannot, in that setting, see ourselves as coming face to face with "wild nature". But the point of the "quick retort" is that even gardens are populated by many species that are truly wild, and are undergoing truly natural evolution. And the point of the "considered response" is to suggest that it is but an accident of time and place that the plants and animals that populate our gardens did not appear without human intervention. And if we suppose, not unreasonably, that it is not the fact of intervention that is the problem, but rather its character, this in turn gives us grounds to question whether we truly interfere with nature's autonomy when we merely manipulate the time and place of their appearance. Nor must we forget that it was, after all, the reality of artificial selection – the process responsible for populating our gardens – that constituted one of Darwin's main arguments for the possibility of natural selection – the process responsible for populating wild nature.

For a variety of reasons, then, it can be argued that through the continued and detailed observing, handling and even the *manipulating* of living things that gardening necessitates, we gain unparalleled insight into the workings of nature – especially if we see ourselves as part of an ongoing conversation designed to elicit what nature will and will not permit.

8.4 Seeking Permission – Eschewing the Unnatural

But Mill, apparently, would have it that, no matter what delights are to be found at Heligan and in similar places, the vaunting of these delights will necessarily constitute "dispraise" of nature. We have tried to show that there are different ways of gardening and that at least some of these ways are grounded in practices that can

be described as the "seeking of nature's permission". If this is the case, then it really does seem rather implausible to regard such practices as encapsulating the "dispraise" of nature.

Why then does Mill think otherwise? The reason why he can only see an opposition between "contrivance" and nature, I suggest, is that – officially at any rate – he failed to notice that there is a sense of the term "nature" that is different from the ones that he identifies in his essay on nature. These are, to recapitulate: (i) the natural as opposed to the supernatural – "a collective name for all facts actual and possible"; (ii) the natural as opposed to the artificial – "what takes place without the agency, or without the voluntary and intentional agency, of man" (Mill 1874, 6, 9).

The sense of "nature" that remains unidentified in Mill's essay is the one that contrasts with the "unnatural". Nor is Mill alone in missing this possibility. One can scour the pages of recent environmental ethics literature and fail to find the slightest recognition that the term "unnatural" might register a concept that is quite distinct from that of – say – "non-natural" or "artificial". An instructive example is afforded by Holmes Rolston's classic essay "Can and Ought We to Follow Nature?". In part, the example is instructive because many of the leading contentions of that essay are in no way at odds with what is being argued here. Thus, Rolston is more than happy to recognise the importance of gardens, which he subsumes under the broader category of the "rural environment": "Three environments – the urban, the rural, and the wild – provide three human pursuits – culture, agriculture and nature. All three are vocations which ought to be followed and environments which are needed for our well-being" (Rolston 1979, 19). Yet he insists on maintaining a distinction between nature and the rural environment – a distinction which he marks in two ways. The first way turns on a distinction in their properties. For Rolston, the rural environment is to be thought of as nature which has been "tamed" (ibid., 21). However, this is a somewhat ambiguous thought, and appears to conflate 'being tamed' with 'being domesticated'. Typically, it is wild animals that we speak of as being 'tamed', and though tamed, they remain the products of natural selection and are in that sense wild. So that the 'tamed', rather than excluding the 'wild', actually presupposes it. It is, rather, domesticated animals – the products of artificial selection – that tend to populate the rural environment. Though here again, the contrast between the rural and the wild proves difficult to sustain. For even if we exclude the numerous species of invertebrates and insects, all of them the products of natural selection and most of them essential to the very existence of the rural environment, we also find there – depending on context – foxes, badgers, hedgehogs, gophers, raccoons, possums, wombats and many more truly wild species. The so-called 'commuter fox' is indeed oblivious of all such boundaries. She is 'tame' enough to forage from trash-cans, yet remains wild enough to elude the foxhounds. Nor are domesticated animals necessarily tame, as the existence of feral cats and dogs makes clear. And even pigs are in the frame. For in mediaeval Europe, they were regularly found guilty of homicide, and – after due process – executed for their 'crimes' (Evans 1987).

The second way of marking the distinction turns on how we relate to nature and the rural environment respectively; for, as he later remarks, "wild nature is a place

of encounter where we go not to act on it, but to contemplate it" (Rolston 1979, 22). We don't need to look far for the reason why he makes this latter claim – namely his conflation of the unnatural with the artificial. If we act on nature, so the argument goes, we introduce artificiality and hence unnaturalness. "There are no unnatural energies", he writes, "Our deliberative agency only manages to shift the direction of these natural forces, and it is that intervention which we call unnatural" (ibid., 12). Hence too, medically attended childbirth, farming and clothing are all described as "unnatural", while any parents who "plan" their children are said to "act unnaturally in the artefactual sense" (ibid., 12–13). But, I want to protest – and hope to show, there just is no "artefactual sense" of the term "unnatural"; or at any rate, this has simply been assumed rather than demonstrated. Indeed one might think that if anything here is unnatural (in the sense of "forced"), it is the very use of this term to describe such innocent activities as attended childbirth, farming, the wearing of clothes and planned parenting.

Mill, on the other hand, does at least acknowledge uses of the term "unnatural" that are distinct from that of "artefactual". Indeed, he goes so far as to describe it as "the phrase by which the greatest intensity of condemnatory feeling is conveyed in connection with the idea of nature" (Mill 1874, 62). At the same time he implies a doubt as to whether "any precise meaning … can be attached to the word" (ibid.). He is followed in this by the UK's Nuffield Council for Bioethics who say, in their discussion of the objections that have been raised to the genetic modification of crops, that: "The "natural/unnatural" distinction is one of which few practising scientists can make much sense" (Nuffield Council on Bioethics 1999, 13). The reason they give is that "unnaturalness" expresses feelings "less of moral concern than of disgust and revulsion" (ibid., 17).

Elsewhere though, Mill himself is less reticent. In his essay on "The Subjection of Women", for example, he has this to say: "unnatural generally means only uncustomary …. The subjection of women to men being a universal custom, any departure from it quite naturally appears unnatural …. To Englishmen [rule by a queen] does not seem in the least degree unnatural, because they are used to it; but they do feel it unnatural that women should be soldiers or members of Parliament" (Mill 1975, 441). One sees at once why he so detests the term – namely, the extent to which, in his day, it was deployed to impede the advancement of women.

Nevertheless, that is far from the end of the matter. For in a continuation of the very passage in which Mill gives "uncustomary" as the "general meaning" of "unnatural", he himself deploys it in a wholly different sense. The passage in question reads as follows: "What is now called the nature of women is an eminently artificial thing – the result of forced repression in some directions, unnatural stimulation in others" (ibid., 451). Here he cannot possibly be understood to be speaking of "uncustomary" stimulation. He seems to mean, rather, "stimulation that is contrary to women's natural inclinations". And this same sense is clearly intended in a later passage of the same work where he writes: "[Women] have always hitherto been kept, as far as regards spontaneous development, in so unnatural a state, that their nature cannot but have been greatly distorted and disguised" (ibid., 494).

It needs only the slightest modification to transform this notion of the unnatural (which has Mill's unofficial blessing, as it were) into a general and workable concept of the unnatural that can be applied to our engagements with nature – the step from "contrary to (a person's) natural inclinations" to "contrary to nature's inclinations". This in turn opens the way for there to be engagements with nature that accord with nature's inclinations (by avoiding "unnatural" interventions).

Certainly, some further clarification is needed of the metaphorical notion of "inclination" that is now being deployed (though we do have Darwin's classic phrase "natural selection" as a prototype for this resort to metaphor). First it must be made clear that nature's inclinations are quite distinct from nature's laws (also, of course, a metaphorical term). They are nature's *de facto* tendencies only. Examples might include the tendency for individual organisms to form clusters that we call "species". Thus we can flout nature's inclinations (for example by producing the "geep" – a creature half-goat and half-sheep, and thus an organism with no near neighbours) but not her laws. Second, and since we are dealing with what nature normally does, we need to distinguish between mere departures from the norm – the abnormal, and practices that flout, or go contrary to the norm – the unnatural. As a rough approximation we may also think of unnatural products or processes as those which are unlikely to have a (natural) ecological or evolutionary future.

Indeed we can cite contemporary examples of the concept understood in (approximately) this way. Under the headline of "Unnatural Confinement" in their 2008 leaflet designed to highlight the plight of pigs across Europe, for example, Compassion in World Farming is drawing attention to the continued use of sow stalls and farrowing crates – metal cages that allow little or no room for movement – in intensive breeding systems. These are systems which effectively thwart almost all of a sow's maternal instincts. Hence, as we have elucidated the term, the headline "unnatural confinement" could not be more apt. And when Richard Lewontin (2000, 345–346) describes the cultivated corn cob as "unnatural" he is surely not, trivially, remarking that it is an artefact, but drawing attention to the fact that it is incapable of dispersing its seed (and therefore has no natural ecological or evolutionary future).

But here is a twist. The cane toad, to cite one of many, similar, examples, was introduced to Australia and is wreaking ecological havoc. The ecological and evolutionary potential of this species in Australia knows no bounds; with almost no other species, it seems, has nature been more lavish with her "permits". Are we committed, then to defending this introduction? Well, no – but the cane toad example is instructive. In broad brush terms, what we have defended is the idea of *tempering* the human dream in light of nature's "customs". In no way does this entail an endorsement of nature's unbridled "customs". In Australia, on the other hand, the case is different. True, the cane toad has an adverse effect on many other nonhuman species. But many a naturally occurring species could – similarly – serve to suppress speciation, in the sense that, were it removed, biodiversity might (naturally) increase. If conservationists would seek to temper nature's exuberance, if they could, in the case of the cane toad, then at least part of the reason, I would suggest, has to be that this would *serve* (rather than temper) a distinctly human dream.

Despite first appearances then, we might reasonably claim to have at least Mill's unofficial sanction:

(i) for denying that gardening is inherently unnatural, as one might think if one were to confuse the concept of the unnatural with that of the artificial, and
(ii) for denying that it entails "dispraise" of nature, as one might think if one ignores the sense of natural that contrasts with that of unnatural.

Provided that our gardening practices are conducted always with an eye to seeking nature's permission, then they may show a proper respect for nature, and in no way constitute "dispraise of nature".

8.5 Seeking Permission – Meaningful Engagement

It remains to discuss how the promotion of gardening after the manner described, and as exemplified at Heligan, explains how gardening and gardens matter in the way that they do. David Cooper's (2006) thoughtful and exemplary discussion of this question can scarce be bettered. My sole reservation is that the account of gardening he gives is not, perhaps, sufficiently "grubby". (A slight indication of this is the absence from his book of any reference to "The Allotment" – a place which is not exactly a garden, but is nevertheless a place where the most exemplary of garden practices can be found.)

The point of the "grubbier" forms of garden practice is precisely the way in which they help us to develop an understanding and appreciation of nature's ways. Clare Leighton (1991, 84–85) writes: "I mow the lawn. How many people know the right way it should be done? Feet should be bare; grass should be slightly damp… We are losing much, these days, when we no longer get this naked contact with the earth." Agreed, we might find this a touch fanciful. The following, maybe less so: "But a veil hangs between me and my garden. I realise what it is, only when I have pulled up a few weeds and put my hand deep into the earth. For weeks past I have been moving about, leading an untrue life, with the attitude of a spectator. Now I need to do things in the garden myself, to dig, to plant. Only in this way shall I grow really intimate with it and understand it" (ibid., 16). For reasons such as these I would be inclined to take issue with David Cooper for suspecting that Gertrude Jeykell "was unusual in maintaining that 'weeding is a delightful occupation'" (Cooper 2006, 70). For Leighton's image of the veil is a good one. And there is no more effective way of tearing away the veil than by getting down to some weeding.

But of course there is weeding, and weeding. If we rely unduly on machine tools, flame guns and sprays, then the veil will remain firmly in place and we shall fail to "grow intimate" with nature. Our gardening activities will in consequence fail to be meaningful. If, on the other hand, we conduct our gardening in the form of a conversation with nature we can achieve engagement that is truly meaningful. Or we might express the point conversely by saying that the quality of our gardening

practices can be seen as some function of the meaningful engagements that they flow from, express and produce.

How then does this come about? Admittedly the case might turn on what we are prepared to agree is meaningful and worthwhile. And those who insist on seeing worthwhile lives in terms of goals achieved, purposes fulfilled, and the like, may not be convinced. But if gardening, like life, is always ongoing, never complete, then perhaps we must be content to find meaning in more mundane and fleeting engagements, or so it is argued in Holland (2009).

First there is the simple noticing of things, and the understanding that can ensue, often from being surprised by what we notice. To take an example from the author's locality, when it came to the laying of fibre optic cable across moorland and hill farms, the first to be consulted were not planners, surveyors or engineers, but those who work the land – the farmers. They understand the drainage, where the water will lie, the underground channels, the very rock formations. Next, as a source of meaningful engagements, there is the deployment of all the senses, captured by Leighton in her talk of mowing barefoot. The sights and scents of the garden come as standard, and we can throw in for good measure Dorothy Gurney's birdsong, from the poem quoted at the beginning of this piece – all the better if (occasionally) accompanied by "the kiss of the sun". Then again there is high drama, as we witness the battle of the spider with the wasp caught in her web, or the rat who risks everything as she transports her young from the nest beneath the hen house when it is unexpectedly moved to another site. Finally, there are the fortunes and misfortunes that overtake our own plans, the excitements and disappointments (and the "lessons learnt") that come from having our plans hijacked by nature. We planted Brussels sprouts, but the hare has eluded our defences and we return to find tonsured stems as picturesque and impressive as anything that an Andy Goldsworthy or David Nash could produce; thus we settle for a work of art as our harvest, rather than food for the table. We planted holly trees at a height of 250 m, and when the snows came and the rabbits could find nothing else to eat, they neatly barked the smooth stems, and the holly trees are no more. (Oddly, rabbits do not seem to burrow into snow to find grass, as one might expect.)

We may think of these as "firsthand" engagements with nature. But it is from them, and perhaps only from them, that we move to more reflective modes of meaning: not only interest, admiration and respect for nature, but also acceptance of its poignant fragility and sadness, perhaps, at its bleak implacability. If nature is a mother, she is a merciless one; and we learn this, as well as anywhere, in a garden.

8.6 Conclusion

What inferences might we draw from these reflections concerning the guiding theme of this anthology – the comparison of old world and new world perspectives? It goes without saying that there are many old world perspectives and many new world perspectives. But if we focus on the contrast between 'hands-on' and 'hands-off'

approaches to nature, then it has to be said that gardens and gardening are no respecters of the distinction between old world and new world if these terms are understood in a purely geographical sense.

'Hands-off' sentiments abound in the old world, as is illustrated by the fact that the ideal of 'letting nature be' formed one of the leading principles behind the formation, in 1895, of the UK's National Trust, a body charged with the stewardship of houses and gardens up and down the land. For another example one cannot do better than quote the fourth stanza of the poem Inversnaid by the English priest-poet, Gerard Manley Hopkins: "What would the world be, once bereft/Of wet and of wilderness? Let them be left,/O let them be left, wildness and wet;/Long live the weeds and the wilderness yet" (Hopkins 1985, 51). The "corollary", too – the notion that an unrestrained 'hands-on' approach is apt to demean nature – is equally well represented in the old world, as when Henry Salt bluntly describes cultivated plants as "prisoners of the parterre" (Salt 1928, 33). Conversely, the iconic 'old world' garden of Hidcote Manor in the UK was in fact the brainchild of the American horticulturalist, Lawrence Johnston. While permaculture, the approach to agriculture that embodies as well as any the principle of 'seeking nature's permission' that has been invoked here, was in fact developed in Tasmania by Bill Mollinson and David Holmgren, building among others, on the ideas of Joseph Russell Smith, a geography professor from Virginia, US.

In truth, 'hands-on' and 'hands-off' tendencies are probably to be found, together, in the breasts of most gardeners world-wide. And the principle of 'seeking nature's permission' is but one attempt to strike a fruitful balance between the two tendencies. If we wish to show respect for nature, then, we can safely follow the old world advice of Voltaire (a man more sensitive than most to the cruelties that life can bring) that he puts into the mouth of his hero Candide. "We must go and work in the garden", says Candide, simply; while his friend Martin offers the rider: "we must work without arguing; that is the only way to make life bearable" (Voltaire 1986, 143–144). Dorothy Gurney, too, wrote about being "nearer God's heart" "in a garden than anywhere else on earth". We have kept the gist of her sentiment, but substituted "nature" for "God's heart". For only in the garden do we get down and dirty, on our knees, and look the slug, or the couch grass, in the "eye". In doing so and at the same time, it has been argued, we shall not be too far adrift from the sentiments of the new world's Aldo Leopold who, at the very beginning of his foreword to *A Sand County Almanac*, writes that "these essays are the delights and dilemmas of one who cannot live without wild things" (Leopold 1989, vii). Just so, one might think of a true environmentalist as one whose idea of a worthwhile life is at best incomplete, and perhaps even impossible, without meaningful engagements with nature – of exactly the kind that gardening affords. It is an irreducibly normative thought, and intentionally so. For we shall not get clear about why nature matters unless we are prepared to make some normative assumptions about what makes life worth living.

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Chapter 9
Green Managerialism and the Erosion of Meaning

Simon P. James

9.1 Introduction

There is widespread disagreement about what it means to look after nature, about which of its parts should be looked after, about why they should be looked after, and about what practical measures need to be taken to look after them. But despite these differences of opinion, it is widely accepted that many parts of the natural world should be preserved, managed, restored or in some other way looked after, if not for their own sakes, then simply for ours, and if not for moral reasons then for prudential ones, say, or on account of their aesthetic value.[1] In the following, I argue that this holds true not just of natural entities but of the meanings that those entities have for us, too. It is not just the case, I contend, that many natural entities need to be protected from harm, restored to health, and so forth. Because of the increasing popularity of meaning-sapping, "managerial" modes of discourse, there is often a need to look after or "cultivate" nature's meanings as well.

My argument runs as follows. In the first section, I suggest that just as natural entities can be wiped off the face of the planet, so the various meanings that such entities have for us can be lost. Next, I argue that what is true of *loss* is also true of *preservation*: just as steps can be taken to prevent natural habitats from being destroyed or species eradicated, so nature's meanings can be preserved. In the third section, I ask whether any of nature's meanings *should* be preserved, arguing, in response, that if we are called upon to do anything with respect to nature's meanings, then it will not be merely to preserve them but to "cultivate" them. Having explained

[1] Widely, but perhaps not universally accepted. For instance, those who endorse Barry Commoner's view that "Nature knows best" may contend that attempts to "look after" nature will typically involve substantial interference with natural processes and should be rejected on that basis (see Commoner 1971).

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what this sort of cultivation involves, I move on to examine some reasons for thinking that nature's meanings should be cultivated. I begin by considering arguments to the effect that they should be cultivated because doing so will (a) motivate people to protect nature, or (b) improve the quality of life of human beings. Noting the limitations of these lines of reasoning, I move on to consider the stronger argument that nature's meanings should be cultivated in order to abide by the norms internal to what I call any broadly hermeneutic practice. In the final section, I make the tentative suggestion that, in discussions of how we should treat the natural world, nature's meanings not only *should* be but *need* to be cultivated. In the face of the rise of what I call green managerialism, there is, I suggest, a special need for the works of men and women such as Richard Mabey, Annie Dillard, Andy Goldsworthy and, more generally, all those writers and artists who are able to look after or cultivate nature's meanings.

9.2 Loss

It is not my intention, here, to enter into the many-sided and often heated debate concerning what nature is.[2] Nevertheless, I ought to say something on the topic, if only to indicate what parts of the world I am referring to when I use the term "nature". So, briefly put, I will be using the terms "nature" and "natural" to denote what is usually thought to constitute the primary subject matter of natural history. If one can reasonably imagine it as the main topic of a book or television programme on natural history, then, for the purposes of this essay, it counts as natural. Marlin, mesquite and marshlands are, as it were, "in"; microwave ovens and motel rooms are "out".[3]

If an entity is to count as natural in this sense, then its current state cannot be entirely the intended product of human activity. Neither, however, need it be completely unaffected by human beings. Although references to the natural history of microwave ovens and motel rooms sound odd, natural history books and television programmes often focus on entities that have been extensively and intentionally shaped by human actions. It would not be unusual, for instance, to come across a book or television programme devoted to the natural history of hedgerows, for example, or heaths. For our purposes, then, these "Old World" environments will count as natural.

One thing that may be noted about nature, conceived in this sense, is that many parts of it are either disappearing or at risk of disappearing. Populations of many kinds of organisms are being decimated, forests are being slashed down and burned, wetlands are being drained. These sorts of losses can, of course, all be described in

[2] I present my views on this topic in James (2009).

[3] Or at least brand spanking new microwave ovens and sparkling clean motel rooms are "out". After all, a natural history book or television programme could conceivably focus on how artefacts rust, become clogged with dirt, overrun by plants and fungi, and so forth. For an interesting discussion of this and related issues, see Vogel (2003).

terms of their physical effects upon natural entities.[4] But this is not the only way that nature can be lost. There is a sense in which nature can be lost, even when it has undergone no physical change, and a sense in which it can be threatened with loss, even when it is not physically vulnerable. For it is sometimes possible to lose the *meaning* of a natural entity, even if the entity itself, conceived in physical terms, remains unaffected.

An example may help to clarify the point. Since the 1940s, Britain's natural heritage has been considerably depleted. Many species of animals, plants and fungi have found their way onto "endangered" lists; some have disappeared altogether. Old growth woodlands have been felled; hedgerows have been uprooted; areas of heath have reverted to shrubland and then to woodland.[5] But it is not just entities that have been lost. As Oliver Rackham notes, meanings have been lost too (Rackham 1986, 26). For, in many cases, nature would have made sense to the past inhabitants of rural Britain in ways that it does not make sense to modern day Britons. Certain landscape features, for instance, or certain kinds of plants, would have had political, religious or mythic meanings that would be lost on modern day observers. With the passing of the generations, the transformation of agricultural practices and the gradual urbanisation of the British Isles and its peoples, at least some such meanings will have been lost.

9.3 Preservation

I have referred to the loss of nature's meanings – but how exactly is the term "meaning" to be understood in this context? To refer to the topic of meaning in the company of philosophers is to open a can of worms. But it is not my aim, in this essay, to enter into any complicated disputes in the philosophy of meaning. I certainly do not intend to engage with the vexed topic of the metaphysical status of meanings – on whether, *qua* normative, they can be satisfactorily accommodated within a naturalistic conception of the world, for instance. Nor will I set out a theory of meaning akin to those that have been developed by writers such as Robert Brandom and Paul Horwich. My aim, in referring to nature's meanings, is simply to register my concern with the various ways that "things" – entities, events or whatever – can make sense (or fail to make sense) to people.[6] I therefore take my cue from those writers, like David E. Cooper, for whom meaning must be measured in relation to what matters to us in the living of our lives, rather than from those who privilege linguistic meaning (cf. Cooper 2003; and Cooper 2006, especially Chap. 6).

[4] It is not just entities that can have (and lose) meaning. So can processes, for instance, or kinds of entity. However, for simplicity's sake, I restrict my attention in what follows to the ways that natural entities can have (and lose) meaning.

[5] See further, Rackham (1986, Chap. 3).

[6] I do not wish to deny that nature might also have meaning for some nonhumans. In this essay, however, I am concerned with the meanings it has for human beings.

Meanings, on this conception, come in several varieties. Natural entities can have referential meaning (as when a certain rock formation stands for the god of a tribe), or historical meaning (as when a meadow is experienced as the site of a famous battle). Their meanings can be symptomatic (as when a farmer recognises a change in the weather as a symptom of an impending storm) or personal (as when a man remembers the tree under which he proposed to his wife).[7] Furthermore, a full account of the meaning of any natural entity cannot simply refer to the sort of meaning the entity is taken to have; it will also have to identify the individuals or social group for whom the entity has that meaning. But these complexities need not detain us here. For present purposes it will suffice to note that there is a sense in which natural entities, like other sorts of entities, have meanings – and meanings, moreover, that can be lost.

And not simply lost. Just as one can prevent natural entities from being over-hunted or chopped down, so nature's meanings can be preserved. Consider the genre epitomised by the works of writers such as Richard Mabey, Peter Marren and Mark Cocker (e.g. Mabey 1996; Cocker and Mabey 2005; Marren and Mabey 2010; Mabey 2007; Mabey 2010a, b; Buczacki 2005). These are works of natural history, yet they do not just provide scientific information, simplified for a popular audience. Nor is their purpose merely to provide useful tips on identification. The main point of such works is instead to convey the wealth of meanings the natural world has for people. Thus Mabey explains that *Beechcombings*, his popular study of beech trees, is about "trees as status symbols, political icons, emblems of reparation, as investments, legacies, heritable goods" (Mabey 2007, xi). Another of his books, *Flora Britannica*, is, he writes, about the meanings plants have "as tokens of birth, death, harvest and celebration, and omens of good (and bad) luck", and as "emblems of place and identity … not just of nations, but of villages, neighbourhoods, even personal retreats" (Mabey 1996, 7). Similarly, although the authors of *Bugs Britannica* have much to say about moths, the creatures they discuss

> are not only nocturnal insects with dusty wings and feathered antennae but also ghosts of departed souls or metaphors for the rusting away of human aspirations or furry winged teddy bears beloved by wide-eyed children. They are not only hawkmoths and silkmoths but also "witches", "millers", "buzzards" and "bob-owlers". (Marren and Mabey 2010, x)

Many of the meanings discussed in such works count as folklore and, like other items of folklore, many of them are in danger of being forgotten, radically transformed or in some other way lost. Over the course of the next, say, 50 years, many of them will no doubt fade away. The entities will remain, but they will no longer mean what they once meant. References to "witches", "millers", "buzzards" and "bob-owlers" are already quaint, but they will come to seem increasingly so until they cease to mean anything at all, save to those few individuals who take a nostalgic interest in such things.

In the face of this trend, works like *Beechcombings*, *Flora Britannica* and *Bugs Britannica* might seem to count as works of preservation. This is not merely to

[7] For a detailed account of these various sorts of meanings, see Cooper 2006, 113–122.

suggest that they can indirectly help to preserve natural entities – by inspiring people to contribute to environmental causes, for example. It is to say that they appear to preserve some of nature's meanings.

9.4 Cultivation

Should books like *Beechcombings* and *Bugs Britannica* be regarded as valuable works of meaning-preservation? Some will have their doubts. First, there is the question of *feasibility*. Writers like Mabey and Cocker have certainly *recorded* many of nature's meanings; however, it is not clear that they have managed to *preserve* any of them. For preserving the meaning of an entity often (perhaps always) requires one to preserve the context within which the entity has the meaning in question, and this will often prove no small task. For instance, I – twenty-first century suburbanite that I am – can read Mabey's account of the ancient meanings attributed to rowan trees, noting, in a detached sort of way, that my rural forebears might once have taken those trees to be protections from evil. But I cannot *live* those meanings in the way that they might once have been lived by my forebears. Our forms of life have grown too far apart. And the same may be said of many of the meanings recorded in works like *Flora*. If such works manage to preserve any of nature's meanings, then they will only be able to do so in a very limited sense.

In many cases, then, it will not be clear that nature's meanings *can* be preserved. And even if it is feasible to preserve one or more meanings, it is a further question whether the meanings in question *should* be preserved. With the passing of time, some of nature's meanings have certainly become vulnerable to loss. Yet in some of these cases this prospect need not be regarded as a bad thing, still less one that should be prevented. Think of the urge to anthropomorphise, to see foxes as cunning or bats as evil. Or consider the ancient tendency to see unusual natural phenomena as portents, or mountains as the abodes of demons, or great apes as stupid hairy people. It is no cause for regret that we moderns are less inclined to find these sorts of meanings in the natural world.

So not all of nature's meanings should be preserved; in fact, some should not be preserved. But should any of them be preserved? Again, some will be sceptical. For a wish to preserve nature's meanings (they will contend) often amounts to little more than romantic nostalgia. Perhaps it reflects a misguided longing to return to a sepia-tinged vision of a pastoral idyll, in which good country folk lived at one with the land (something like Tolkien's Shire, perhaps). Or maybe it reflects a wish to return to the comforts of childhood, before the naturalist in each of us died. But all of this, the sceptic argues, reflects little more than fantasy. In most cases, it is not so much that nature's meanings have been lost; they have simply changed. And in these cases it would be foolish to go against the tide. There can be no return to an innocent harmony with nature. No such harmony ever existed.

The sceptic has a point. Preservation is backward-looking. I grant that I have not yet shown that we should "do" anything with respect to nature's meanings, but if we are called upon to do anything, then it will not just be to preserve the past. As the

authors of a recent work on environmental ethics rightly say, to look after nature need not be to preserve it as "a museum piece", but to consider which futures are "appropriate" and to guide natural processes in those directions (O'Neill et al. 2008, 157; 176). Although they are referring to the referent of the term "nature" – certain entities, processes, etc. – the same may be said of nature's meanings. If anything should be done with respect to nature's meanings, it will not merely be to preserve them but to do all sorts of other things as well. Some meanings will need to be fostered, others left alone. Some will need to be transformed, others eradicated.

"Cultivation" may be a fitting word here. An appropriate image, moreover, is perhaps that of a gardener: not the hubristic individual whose primary aim is to bend nature to her will, but the gardener who responds to the needs of his plants, allowing some to flourish and others to die back; the gardener who, when circumstances demand, sows seeds and digs in bulbs, who sometimes guides the way his garden develops and yet sometimes recognises the need to stand back to allow nature to take its course. Just as the plants in a garden can be looked after, so nature's meanings can be cultivated.

This sort of cultivation can be achieved in many ways. Take art, for instance. The works of artists like Andy Goldsworthy or David Nash provoke certain feelings in those who encounter them, but they do more than that: to adopt a Heideggerian phrase, they "gather" meaning.[8] A case in point is Goldsworthy's *Hidden Trees*: three fallen trees, salvaged from forestry work in a country park, and enclosed by a dry stone wall within a ha-ha. In his discussion of the work, Mabey notes that it "reveals, in the depths of the ditch, the reality that was hidden: reckless forest clearance, hard human labour" (Mabey 2010a, 155). Goldsworthy's work gathers that reality, those meanings. Of course, to qualify as an instance of meaning-*cultivation*, the meanings thus gathered must be of the right sorts. And establishing whether or not, in any particular case, the meanings qualify as "right" may prove no easy job. Even so, the general contours of an account of rightness should be clear. While the right meanings will be the fruits of sensitivity and attentiveness, amongst other things, the wrong ones will reflect errors such as anthropomorphic sentimentality. It is beyond the scope of this paper to prove the point, but for now I simply assume what in any case seems plausible: that, by the lights of such standards, *Hidden Trees* does not just gather meanings, but cultivates them too.

It is not only visual artworks that can do this. Just as nature's meanings can be cultivated by (or in) a great painting or sculpture, so they can be looked after by the poetry of a Seamus Heaney or a Ted Hughes, or by the prose of individuals like Robert Macfarlane or Annie Dillard. Equally, nature's meanings can be cultivated by historians such as Simon Schama or phenomenologists like Gaston Bachelard, or in fact by any individual who, with an apt phrase or well-crafted passage and without succumbing to errors such as sentimentalism and cliché, can gather nature's meanings. These writers are looking after nature – not the referent of the term "nature", but its sense. And their works leave one with a deepened and widened sense of nature's meanings.

[8] See Heidegger's essays "The Thing" (Heidegger 1971) and "Building Dwelling Thinking" (Heidegger 1996).

More will be said below about what this sort of cultivation involves. But for now it will suffice to note that it is best achieved, not by managerially-minded administrators, but by those, both inside and outside academia, who represent all that is best in the arts and humanities (including the qualitative social sciences). The meaning-cultivators referred to above – men and women like Goldsworthy, Heaney, Dillard, Schama and Bachelard – belong to the arts and humanities. Their works represent the arts and humanities. And the sort of "looking after" of nature they have been able directly to achieve through their works is the province – though not the exclusive province – of the arts and humanities. It is one way that people who work in disciplines such as literature, theology, fine arts, anthropology, philosophy and history can look after nature.

9.5 Three Answers to the Question of Normativity

9.5.1 Appeals to How We Should Act

I have proposed that just as natural entities can be looked after, so nature's meanings can be cultivated. But the question of normativity remains: Is there any reason to think that nature's meanings *should* be cultivated?[9] One argument in support of the conclusion that they should runs as follows. Assume that there are reasons to protect some natural entity. It may reasonably be supposed that in some cases (1) people will be more likely to protect the entity if they take it to have certain meanings, and (2) they will be more likely to do this if the relevant meanings have been cultivated. Suppose, for instance, that pine martens should be protected. It is reasonable to think that people will be more likely to take steps to protect the creatures if they take them to have certain meanings (if, say, they regard them as emblems of wildness). And it is reasonable to suppose that they will be more likely to regard the creatures in the relevant ways if the relevant meanings have been cultivated by sensitive and eloquent individuals such as the nature writer and marten-lover John Lister-Kaye (e.g., Lister-Kaye 2010).

This argument may provide a reason to cultivate nature's meanings in some cases; in others, however, it will not. For the claim that people will be motivated to act in certain ways in their dealings with nature if they take it to have certain

[9] Two clarifications. First, in the following discussion "should" is to be understood broadly, as encompassing not just moral "shoulds" (or "oughts"), but other kinds of norms too – prudential ones, for example. Second, to ask whether nature's meanings should be cultivated is not to ask whether each and every one of us is obliged to cultivate nature's meanings. It is to ask whether the world should be such that nature's meanings are cultivated. In this respect, then, to ask whether nature's meanings should be cultivated is like asking whether meaningful work should be available for able adults. To answer the latter question in the affirmative need not be to suggest that each and every one of us is obliged to try to ensure that such work is available. It is to maintain that *the world should be such that* meaningful work is available for those who are able to do it.

meanings is not equivalent to the claim that they will be so motivated if *and only if* they take it to have those meanings. In some cases, people might be motivated to perform the relevant actions, not because they take nature to have certain meanings, but for some other reason – because, for example, they have been persuaded by the results of a cost-benefit analysis. Besides, even when a group of people would not have been motivated to act in certain ways with respect to some natural *x* had they not taken it to have certain meanings, it is a further question whether they would have taken *x* to have had those meanings had they not been cultivated by individuals such as Lister-Kaye. In some instances, after all, the best way to motivate people to take action on behalf of nature is to resort to sentimentalism, to portray whatever one deems to require looking after as, say, cute and cuddly. In these cases, one might not be cultivating – or "looking after" – the meanings of the entity in question, but one might nonetheless be helping to look after – e.g., protect – the entity.

9.5.2 Appeals to Quality of Life

In the face of these difficulties, one might choose to adopt a different strategy: to argue that nature's meanings should be cultivated, not because doing so will motivate people to do what they should do, but because it will directly benefit them by improving their quality of life.

An example should help to clarify the point. So, imagine a land – Insemantia – in which climate change has been curbed, anthropogenic pollution drastically reduced and all manner of valuable species saved from extinction. Insemantia is a lush and thriving land; at first sight, in fact, it would seem to be an environmental utopia. But now suppose that the land's inhabitants suffer from a peculiar inability to find meaning in nature. They are meaning-myopic, if not wholly meaning-blind. Perhaps they not only endorse materialism but also tend, in their reflective moments, to regard nature as being little more than the meaningless hurrying of matter. This meaning-myopia is not bad for nature: as we saw, Insemantia's fauna and flora are flourishing. It might, however, be bad for the land's human inhabitants. Maybe the Insemantians' quality of life would be higher were they privy to nature's semantic richness and depth. And if their quality of life would indeed be higher were they privy to that richness and depth, then there is at least one reason to cultivate nature's meanings in Insemantia. All things being equal, they should be cultivated because doing so would improve the Insemantians' quality of life.

There is something to be said for this argument. If the Insemantians' lives really would be improved were they able to find more meaning in nature, then there really is at least one reason to cultivate nature's meanings in Insemantia. Yet it does not follow that the only way the Insemantians might come to find more meaning in the world would be for them to come to find more meaning in *nature*. On the contrary, it is plausible that the same result could be achieved were their eyes opened to the meanings of *non*-natural things such as architecture, abstract sculptures or still-

life paintings. Indeed, by developing their appreciation of such things, it is conceivable that the Insemantians could come eventually to live rich and fulfilling lives, despite their persisting inability to find much meaning in nature.[10] The general point is that even in those cases when appeals to quality of life provide a reason to cultivate meanings, it is another question whether the relevant meanings must inhere in specifically natural things.

9.5.3 Appeals to Hermeneutic Norms

In some cases, then, nature's meanings should be cultivated because doing so will either (a) motivate people to do whatever (for independent reasons) should be done to, or with respect to, nature, or (b) improve the quality of life of human beings. But even when neither (a) nor (b) provides sufficient reason to cultivate nature's meanings, there is no need to conclude that the question of normativity cannot be answered. For there is a simpler reason why nature's meanings should be cultivated: they should be cultivated because that is what must be done if one is to abide by the norms internal to any broadly hermeneutic practice.

This requires explanation. In apprehending meanings, in taking a thing to have one meaning rather than another, one is often subject to certain norms – not necessarily moral "oughts", but certain norms, nonetheless.[11] People have different views about the sources of these norms – about whether they are basically aesthetic or moral, aretaic or deontic, or whatever. But almost all parties agree that such norms exist. And not just this: although opinions differ about particular cases – about which norms are appropriate in a given situation, say, or about what the norms in question demand – there is widespread agreement about what the relevant norms are. It is widely acknowledged that in apprehending meanings one should for the most part and amongst other things be unprejudiced, for instance, and not overly sentimental. In apprehending meanings, in taking part in what I call any broadly hermeneutic practice, one is subject to norms of this sort.

All of this seems to apply to the apprehension of nature's meanings. At least, it is difficult to see what could justify the claim that there are only good reasons to be unprejudiced, open minded, receptive, etc. in one's dealings with *non*-natural things. It is surely more reasonable to suppose that one should be unprejudiced, etc. in apprehending the meanings of natural entities, just as one should be unprejudiced,

[10] Cf. Raimond Gaita's reservations about the notion that "an interest of any kind in nature … is essential to a full development of one's humanity" (Gaita 2003, 157.).

[11] This is not to say that it is always legitimate to either to praise or to criticise a person for taking a thing to have one meaning rather than another. In many cases, for instance, an individual will be unable voluntarily to alter the meanings she takes a thing to have, and in many of these cases she will deserve neither praise nor criticism for her tendency to apprehend whatever meaning she apprehends. ("In many of these cases" because in some of them her inability to apprehend a certain meaning may be the result of voluntary choices she made in the past for which she is responsible.)

etc. in apprehending the meanings of other sorts of entities. It is more reasonable to suppose, in other words, that there are good reasons to cultivate nature's meanings insofar as there are good reasons to cultivate the meanings of anything.

9.6 Green Managerialism and Meaning-Loss

Much more would need to be said to prove the point, but let us assume, for the sake of argument, that nature's meanings should be cultivated. Do they *need* to be cultivated?[12] It is tempting to answer that they do. It is tempting to suppose that on account of the rise of scientism (or some other meaning-sapping trend) nature is being gradually leached of semantic richness, and that, because of this, its meanings need to be cultivated. Yet sweeping claims of this sort are hard to justify. For instance, what exactly is scientism? Is it really spreading? If so, amongst whom? And will someone who is inclined to endorse scientism be for that reason less inclined to cultivate nature's meanings? In the absence of the necessary empirical and conceptual work these questions cannot be adequately addressed. In any case, it is beyond the scope of this paper to try to answer them. In the remainder of this section, then, I will not try to prove the bold conjecture that nature's meanings are, as a whole, in need of cultivation. Instead I will attempt, more modestly, to show that nature's meanings need to be cultivated *in a certain context*.

So, taking this cue, let us restrict our attention to discussions of how we ought to act in our dealings with the natural world. Even a brief survey of the literature on this topic will reveal that nowadays such discussions tend to be conducted in a particular idiom, that of managerialism. It is assumed that dealing with nature is chiefly an exercise in management, in which one sets out one's vision, states one's objectives and identifies key performance indicators (or KPIs), and in which it is considered to be of paramount importance to think strategically, and to have clear, quantifiable outcomes that will, ideally, be produced with maximum efficiency. It is assumed that in considering our actions with respect to the natural world one should adopt the idiom epitomised by statements such as the following:

> Regulatory systems need to be accompanied by policies that encourage positive participation in environmental management in cost-effective and innovative ways. Efficiency in achieving nature conservation objectives is important and requires suitable targeting of measures and policies, and suitable incentives to secure participation.[13]

[12] The question is not redundant since even if something should be done, it is a further question whether there is a need to do it. To recall our previous example: even though meaningful work should be available for all able adults, it is a further question whether there is a need to provide such work in any particular context. After all, a certain town might already provide ample opportunities for meaningful work, in which case there is no need to provide more.

[13] This quotation is from a representative of the (now dissolved) government agency English Nature (cf. Felton 1993, 30).

This idiom – that of "green managerialism" – affords little or no place for considerations of meaning. It can accommodate talk of biodiversity indices or natural capital, but historical, religious, mythic, political meanings – all these run straight through it, as through a sieve. To a large extent, this is because of the emphasis managerially-minded thinkers place on quantifiable outcomes. But it is also a result of the singularly abstract, general and impersonal quality of managerialism. For adopting the role of a manager requires one to abstract from the particularities of the situation with which one is dealing, to regard it in terms of certain general categories (objectives, KPIs etc.) and the formal relations between them. As such, it encourages one to regard nature from what Sven Arntzen calls an "outsider's perspective", one that is ill equipped to do justice to the various meanings nature has for those "insiders" who engage with it in the living of their lives (Arntzen 2008). In fact, reading the works of managerially minded environmentalists, one is frequently struck by the sense that they could be managing *anything*, from financial assets to university courses to medical services. The idiom of objectives, targets, KPIs and so forth is entirely general, and the fact they are dealing with the natural world seems to be incidental.

The conceptual and linguistic palette provided by the idiom of green managerialism is clearly too restricted to do justice to nature's semantic richness and depth. But it would be wrong to suppose that that idiom should therefore be abandoned. On the contrary, our efforts to prevent the destruction of habitats and the eradication of species would doubtless come to nothing if all of us spent our time trying to write like Annie Dillard or Ted Hughes. Waxing lyrical is all very well, but to get something done one often needs to abstract from the complexity of the situation one is considering. Indeed, it is not my intention, here, to suggest that the managerial idiom is inherently pernicious. My aim, rather, is to draw attention to its limits. Because of those limits, there is reason to lament the popular tendency to adopt a managerial idiom in discussions of how we should act in our dealings with nature. In that context, there is, I would suggest, a need to cultivate nature's meanings.

9.7 Conclusion

It is widely accepted that nature, in many of its various manifestations, should be looked after; that it should not be hunted to extinction, for instance, or slashed down and burned for profit. But if the case set out above is well taken, then there is also a need to look after or "cultivate" nature's meanings. So if we need environmentalists to ensure that the world does not become clogged with pollution and divested of nonhuman life, we also need men and women like Mabey, Schama, Dillard and Goldsworthy. For by cultivating nature's meanings these individuals help to prevent the development of another sort of dystopia, one in which the rainforests have been saved, global climate change curbed, species preserved, but in which we, like the Insemantians, have lost our sense of what nature means and have come to regard each of these wonderful feats as nothing more than an objective achieved, one more step towards realising our "strategic vision" of a comprehensively managed world.

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Part III
Wolves and Wildness

Chapter 10
The Wolf Is Coming! Emplacing a Predator That Is Not (Yet) There

Martin Drenthen

10.1 Landscape Change in Europe and the Resurgence of Wildness

The European landscape is rapidly changing. As European countries are trying to find new, more sustainable attitudes towards nature, the value of 'wild' nature is increasingly being recognized. To compensate for centuries of environmental decline, efforts are made to increase the share of natural areas in Europe (Coleman and Aykroyd 2009). As a result of renaturing projects, designation of new, large-scale habitat areas, and the reintroduction of extinct species, wild nature is literally gaining ground. The establishment of large-scale wilderness areas, the so-called PAN-Parks (Protected Area Network), is meant to create stable refuges for biodiversity, whereas the European ecological network Natura 2000 will connect existing natural areas so that species can migrate more easily and biodiversity loss due to fragmentation is counteracted. These developments are applauded by the general public, but occasionally they meet local resistance, particularly in areas with a long agricultural history, despite the fact that many livestock breeders willingly cooperate when offered financial compensation.

Next to ecological restoration, which is the conscious, anthropogenic attempt to make more room for natural processes and natural entities, wild nature also resurfaces spontaneously, notably in abandoned rural areas (Höchtl et al. 2005; Hunziker 1995). Overall, the European human population is decreasing, and will continue to do so in the upcoming years. In particular, people are moving to the urban centers, leaving rural regions abandoned. But the resurgence of the wild is not limited to rural, fairly uninhabited zones. In some urban zones, too, urban adapters such as fox and stone marten increasingly roam the city centers and suburbs

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(Müskens and Broekhuizen 2005). In general, in many cultural landscapes the human influence on the landscape is becoming less dominant, and non-human species are taking the opportunity to occupy new habitats. Lynx, bison, beaver and wild boar are already repopulating areas where they had gone extinct centuries ago (Deinet et al. 2013).

One of the most spectacular examples of the spontaneous resurging of wild nature is the return of the wolf. The wolf was exterminated in most parts of western Europe in the nineteenth century. Populations only existed in more remote areas in Eastern and Southern Europe. But in the last decade, wolf populations again spread across Europe. Eastern European wolves have occupied regions in former East Germany, and they are still moving westward. Wolves have already entered Denmark, and are expected to arrive in Belgium and the Netherlands at any moment.

10.2 First Signs of the Wolf in the Netherlands

In the Netherlands, the possible arrival of the wolf has stirred a lot of attention and debate. There have been several wolf sightings in Germany within 100 km from the Netherlands since 2010, and in the Netherlands near the German-Dutch border between 2011 and 2013, although most of these most reports were considered too unreliable by experts. The first probable Dutch wolf sighting took place on August 2011, less than 20 km from Germany. Several people took pictures of the animal, and many but not all experts were convinced that this could indeed be a genuine wolf.[1] Immediately after this first sighting, many more people reported having seen a wolf, although most experts were highly suspicious about these sightings, and believed people were mistaken dogs for wild animals.[2]

Less than 2 years later, however, in April 2013, a much less controversial wolf sighting took place, near the German town of Meppen, only 10 km from the Dutch border – walking distance that is. The animal was filmed by a so-called camera trap.[3] The picture was generally considered a genuine proof, and a

[1] For an eye witness account, see Tom Thorp's chapter in this volume.

[2] George Monbiot (2013a, 49–61) discusses this strange phenomenon of predator sightings. Focusing on sightings of large cats in the UK, he discusses many cases in which experts are convinced that no large cats exist in the wild, but still many people insists they encountered one. Monbiot explains these sightings as a symptom of 'ecological boredom', where the fact that the average urbanite today lives a far too controlled and ordered life and unconsciously feels a deep longing for wild encounters.

[3] Due to their increasing affordability, camera traps play an ever more important role in detecting animal activity. A remarkable example took place on Christmas 2012 in the German town of Langburkersdorf. The Schubert family had gotten a camera trap as a Christmas present from their children. They decided to install it in their back garden right away. After two nights of inactivity, the third night the camera caught two wolves visiting the garden (Lange 2012).

Fig. 10.1 Luttelgeest, Noordoostpolder where the deed wolf was discovered (Photo: Martin Drenthen)

confirmation that indeed the wolf was about to enter Dutch territory. And yet, to most it was still a surprise when on July 4th 2013 a driver found a dead wolf in the Noordoostpolder – presumably killed by traffic. It seemed that the wolf had managed to come back to the Netherlands, 130 years after the last wolf had been shot in 1881.

The discovery caused a lot of upheaval, especially because most Dutch people did not think it possible that a large predator such as the wolf could recolonize one of the most densely populated areas in the world. It was even stranger that the wolf was found in one of the newer parts of the Dutch landscape: the Noordoostpolder, a relatively recent land reclamation (1936–1942), consisting of mostly intensive agricultural land – not the first place that springs to mind when considering suitable habitat for a wild animal in search for new living space (see Fig. 10.1).

Dutch people today only know of wolves from fairy tales such as Little Red Riding Hood, as do most Western Europeans. As a result, they are very much prone to delusive wolf expectations, either in the form of unrealistic fears about the dangers of wolf predation, but also in the guise of overly romanticized wolf images. The debate on the wolf can easily go wild, if we are talking about imaginary wolves,

instead of the actual animal. For that reason, *Wolves in the Netherlands*, a coalition of Dutch conservation groups,[4] had been preparing the general public for the arrival of wolves for a few years already, inspired by the apparently successful wolf education projects in Germany.[5] Through education programs the group tries to raise wolf consciousness, educate the general public about wolf behavior, spread knowledge about possible measure to prevent damage and losses to livestock, argue that the wolf could be an asset to the ecological health of Dutch nature and thus convince the Dutch people that, in general, humans do not have anything to fear and much to gain from the arrival of wolves.[6] But when the wolf finally arrived, it sparked a debate that hardly anyone had anticipated: a highly emotionally charged debate about the role of the wolf in Dutch landscape, but also about the role of humans within that landscape.

10.3 The Contested Nature of Ecological Restoration in Europe

Debates about the human-nature relationship were already an issue in Dutch public life, as a result of large-scale nature restoration and rewilding projects. Especially urban people often perceive the rewilding of traditional agricultural landscapes as a threat. Generally speaking, urbanites consider wild nature special and worth protecting, but many inhabitants of rural areas, especially farmers, more often appreciate landscapes in which nature has been domesticated and transformed through a long process of cultivation (Kowalsky, in this volume). Conversely, rurals tend to associate rewilding areas not so much with 'real nature' but rather with 'neglect', chaos or even litter. Surveys have shown that many local inhabitants feel that the changes due to ecological restoration undermine their attachment to the traditional historic cultural landscape, even in those cases where the outcome is seen as aesthetically pleasurable (Buijs 2009). They fear a loss of their sense of identity, because the particular character of the typical local cultural landscape will decrease and will be replaced by the kind of 'natural' landscapes 'that could exist anywhere' (Drenthen 2009a). In debates like this, ideas and opinions about ecological restoration and nature conservation become entangled with wider issues such as those

[4] *Wolven in Nederland* is a coalition of Natuurmonumenten (Society for preservation of nature monuments in the Netherlands, the largest private conservation organization in the Netherlands), Zoogdiervereniging (Dutch Mammal Society), and Ark Nature (an influential Dutch rewilding organization that is also initiator of Rewilding Europe). See http://www.wolveninnederland.nl (accessed 6 January 2013).

[5] The German environmental organization NABU, Naturschutz Bund, started the education project 'Willkommen Wolf' soon after the first wolves had entered Germany from the east in 2000.

[6] One of the other aims of *Wolven in Nederland* is to initiate research on wolves, for instance by closely monitoring and keeping record of the killing of sheep by domesticated dogs, so that—by the time the wolf would finally arrive—wolves would not be held responsible for all sheep kills.

concerning identity, the meaning of history, power relationships, the alienating effects of globalization, McDonaldization and so forth.

When rewilding and nature restoration are considered as elements of a equalizing process of globalization, this can seriously undermine the legitimacy of nature conservation efforts. At stake in many of these debates is the issue of what kind of people we ourselves want to be, what kind of identities we want to inscribe in the landscape, and how we want to continue the long history of cultural landscape (Drenthen 2013).

With the arrival of the wolf, these debates deepened. What is new about the arrival of the wolf is that for the first time in many centuries, nature does *not* resurface because we decided it should, but autonomously and spontaneously. Landscape changes as a result of policy decisions and planning for conservation are one thing, but changes resulting from spontaneous natural developments, are something that the Dutch were not used to for long. 'Nature itself' appears to be challenging our standing ideas about ourselves.

10.4 The Trouble with Wilderness from a European Perspective

For the larger part of the twentieth century, Europeans regarded wilderness as something that had vanished from the old European continent. Wilderness was that pristine and 'untouched' nature that one could find in other parts of world, particularly in New World places such as the Amazon rainforest, the Australian outback, and of course, those archetypical North-American wilderness parks such as Yellowstone and Yosemite.

Most environmental humanities scholars know that the notion of wilderness as pristine, and devoid of human influence, is deeply problematic (Oelschlaeger 1991; Callicott and Nelson 1998; Nelson and Callicott 2008). Historical research has revealed that many supposed wildernesses were not really pristine and untouched altogether (Cronon 1995).[7]

It is important to note that many of these debates have not had real influence on the conception of wild nature of the general public, especially in Europe. Most Europeans still consider wilderness as untouched nature, and then conclude that such a thing does not exist anymore in Europe (let alone that it could come back). Some European conservationists, however, seem to have taken note of the philosophical wilderness debate, and have changed their conception of wildness *and* their rhetoric accordingly. This redefinition of wilderness and

[7] Cronon argued that so-called wildernesses are not so much realms outside culture but rather reflections of a society's most unreflected wishes and aspirations. The American wilderness was a fantasy of those European settlers that had left their old continent, where each spot was already occupied and owned by someone else, in search for an open, uninhabited place of freedom, a land with unlimited possibilities. (Also see Marcus Hall's chapter IN THIS VOLUME).

development of alternative meanings of wildness has had a clear influence on European conservation strategies, and is one of the reasons for the popularity of the so-called rewilding movement, which is particularly prominent in Western European countries (Monbiot 2013a; Marris 2011; Balmford 2012).

10.5 The European Rewilding Movement

The notion of rewilding is increasingly popular among European conservationists. Large projects are initiated to transform huge abandoned agricultural cultural areas in Southern and Eastern Europe into new wilderness parks where natural processes are allowed to rule the landscape.[8] Rewilding is mostly talked about in terms of a conscious effort to create more natural landscapes, to breaching dikes to create wetlands (Drenthen 2009a), and to actively reintroduce or 'invite' lost species to repopulate former agricultural land. Rewilding can be seem as the effort to restore the historic continuity with the 'natural history' of a landscape (Drenthen 2013), but another key element of rewilding is the attempt to let go of human control, or rather, about a 'controlled decontrolling of nature' (Keulartz 2012).

According to its advocate George Monbiot, rewilding is "the mass restoration of ecosystems" that presents "an opportunity to reverse the destruction of the natural world" (Monbiot 2013b). It

> should involve reintroducing missing animals and plants, taking down the fences, blocking the drainage ditches, culling a few particularly invasive exotic species but otherwise standing back. It's about abandoning the Biblical doctrine of dominion which has governed our relationship with the natural world (ibid.).

According to Monbiot, rewilding programmes in several parts of Europe "are beginning to show how swiftly nature responds when we stop trying to control it" (ibid.). But rewilding is not just about reintroducing species, and allowing natural processes to resurface, it is also considered to be something that is important to *us:* rewilding ourselves is just as much part of the ideal of rewilding:

> Some people see rewilding as a human retreat from nature; I see it as a re-involvement. I would like to see the reintroduction into the wild not only of wolves, lynx, wolverines, beavers, boars, moose, bison and – perhaps one day in the distant future – elephants and other species, but also of human beings. In other words, I see rewilding as an enhanced opportunity for people to engage with and delight in the natural world. (Monbiot 2013a, 11)

Seen from this perspective, rewilding challenges existing ideas about the nature of the landscape and about the relationship between the landscape and human history, and the identities that built on them. However, as many rewilding advocates stress, in essence rewilding is still about the need to create new cultural landscapes: these new wildernesses merely reflect our changed ideas and ideals about nature; and rewilding can be seen as an attempt to meet the postmodern desire for a life less

[8] See: http://www.rewildingeurope.com.

ordered, less tame. Seen in this way, rewilding is the conscious effort to change the landscape, it's just another phase in human history, in which we inscribe a particular societal and aesthetic ideal on the landscape, albeit that in our new ideal we aspire to give away control (Drenthen 2009a). Old ideals about the proper place for humans in nature are replaced by new ones, and become reflected in the new landscapes we create. To the degree that rewilding developments are the result of conscious efforts and planning by humans, landscape conflicts about rewilding are in essence just another political conflict between different visions about the future of society and its proper relation to the natural world.

It may well be that the explicit moral ideal behind rewilding is the effort to let go of control, to accept natural processes to take place again, and to practice tolerance for nature following its own course. But in most occasions, rewilding can also be decoded in such a way that humans are still the main agents of this process: we modern enlightened humans *decide to no longer want to fully control* nature. It is mostly a case of *controlled* decontrolling. But spontaneous rewilding changes the nature of this game. As soon as we have to deal with entities in nature that have their own agency, and that behave in ways that we do not like and that we *cannot* control, then it turns out that it is hard to tolerate nature as an independent autonomous force.

And nowhere can this problem be felt more clearly than in our confrontations with dangerous predators.

10.6 Spontaneous Rewilding as a Challenge

Our relation with wild predators is an old theme in environmental philosophy. One of the most classic accounts of an encounter with a dangerous predator is Val Plumwood's 1999 essay 'Being Prey', in which she describes how she was almost eaten by a salt water crocodile while being on a canoeing trip in Kakadu National Park. In that text, Plumwood reflects on the meaning of this almost fatal encounter with the crocodile. For Plumwood, the realization that we humans can become prey changes the perspective on the place of humans in nature. We are flesh, and as such, we can be on the menu of carnivores. We are being eaten by bugs and viruses all the time, but being prey to a crocodile is much more difficult to ignore. Often we feel that we are on top of the food chain, which makes it easy to forget about our place in the web of life. But the realization that we can become prey is not just a triviality,[9] but has deep consequences for how we should perceive ourselves.

In her work, Plumwood has argued repeatedly that the moral quality of a society can be judged from its relationship with predators. For Plumwood, this also meant that she would have been strongly against killing the crocodile to save her life. We should not blame a crocodile for doing what crocodiles do – eating prey – especially when we invade the animal's habitat. It is easy to feel love and care for cute, fluffy

[9] Tom Thorp seems to go one step further with his claim that most of our reactions to wolves are a response to the fear of being eaten alive (Thorp, IN THIS VOLUME).

animals, and want to co-exist with them. It is quite another thing to give room to animals that can be inimical to us. If we want to co-exist with predators, we need to tolerate animals that can be dangerous to us, which means that we will need to develop an environmental culture that helps us to adapt and reconcile our wishes and aspirations with the needs of other beings. Many wildlife enthusiasts feel that we must restrain ourselves from attempts to dominate nature in those instances that we visit 'wildernesses', even if that means that we expose ourselves to certain dangers. We desire wilderness as nature beyond our control, and therefore, it would be inappropriate if not nonsensical to enter these domains while attempting to control nature. Enter at your own risk.

In many places in the world, something of this attitude is still part of ordinary life, when people inhabit regions where humans do not have the upper hand, and are still aware of the fact that their home is also home to dangerous animals. Those who live deep in the forests of North America know that they share living space with wild animals, that they live at the borders of humanly dominated land.[10]

But this experience of wildness at the borders of the human domain has ceased to play a role in public culture in many places in the world, particularly in Europe. Increasingly, Europeans are city folk, or inhabitants of cultured lands. Except maybe for a few remote areas in the Alps and Pyrenees, most Europeans have grown accustomed to seeing their continent as fully domesticated; to them, Europe is an essentially *human* place, not just in the sense that it consists of cultural landscapes that are influenced by humans, but as essentially domesticated landscapes: places that exist fully for the sake of humans. Of course Europeans know that other non-human beings occupy these places as well, but the division of roles has been clear to all: humans are in control here, animals are only allowed in the margins. The moment that wild predators enter those human areas for the first time in ages, everything changes.

10.7 Reading Landscapes to Understand Ourselves

The way we interpret the landscape reveals much about the way we see ourselves. Some scholars conclude from this that landscapes can be interpreted at will: we merely project our worldview on a landscape, so that it reflects the things that we hold important. I believe, it is much more helpful to see the relation between landscape and meaning as reading practices, in which readers and texts are engaged in a dialogue (Drenthen 2011). Landscapes can function as contexts that we use to understand ourselves. O'Neill et al. (2008, 162–164) have pointed out that people make sense of their lives by placing themselves in a larger normative context, and that this is one of the reasons why *environments* matter to people too: because environments embody just such contexts for self-understanding. This is obvious for cultural landscapes, in which one can read reflections of our history and of human

[10] As soon as the land is seen as essentially a production landscape, than the tolerance for predatory wildlife will rapidly drop (cf. Thorp, IN THIS VOLUME).

activities. Yet it applies to the specifically natural world as well: nature can function as a larger normative context with its own narrative dimension.

However, there are many different 'placial' and temporal dimensions at play in our relation to the landscape, which can give rise to different normative interpretations of the meaning of a landscape. Such differences play a role in many environmental conflicts. One such conflict is the clash between those who care for the conservation of old cultural heritage landscapes, and those who believe that we have an obligation to "rewild" our landscapes, or to "create new nature", as the Dutch like to say.[11] Such ethical positions rely on different *readings* of the landscape: interpretations that not only reflect a specific ethical relation to the landscape, but are also utterly bound up with notions of personal identity and sense of place (Drenthen 2011; Drenthen 2013; Deliège and Drenthen 2014). That is why different landscape readings can easily give rise to deep and seemingly irresolvable conflicts about the landscape, especially when existing landscape interpretations are challenged by rapid landscape change. This is the case even more so when we are confronted with changes that are not initiated by us, but where nature itself spontaneously changes and forces us to redefine our place.

According to philosophical hermeneutics, we interpret the world by 'appropriating' it through our pre-understandings – bringing the phenomenon 'home', as it were –, and yet, in our attempt to do justice to our experience of meaning, we also need to distance ourselves from our pre-understandings and expose ourselves to what the 'text' of the world itself has to say to us. Because of this the dialogical relation between self and world, each understanding of the world also implies a form of self-understanding. And therefore, as soon as radical changes force us to revise our understanding of a landscape, our identity is at stake as well.

The case of the arrival of the wolf in the Netherlands can be seen as a good opportunity to see how different readings of a landscape – or of one particular species entering that landscape – reflect different outlooks on life and the world, and present different readings of the meaning of landscape as a larger context for self-understanding.

10.8 Three Perspectives on the Wolf

So let's go back again to the Netherlands, summer 2013, and the discovery of the first wolf in the Noordoostpolder. As soon as the wolf was found, a societal debate sparked. In it, one could discern several perspectives, all of which reflect a different

[11] The term "new nature" may seem odd to an outsider, but it is the most often used word for ecological restoration projects in the Netherlands. The term expresses the idea that nature is "built" in places where it had been obliterated in the past, much in the same way as the rest of the land was built by humans. The terminology reveals the deep Dutch conviction which is best expressed in the often used quote of the seventeenth century French philosopher Rene Descartes "Dieu a créé le monde, mais ce sont les Hollandais qui ont fait la Hollande." ["God created the world, but the Dutch created The Netherlands."]

reading not just of the wolf and the landscape it emerged in, but also of what it means to be Dutch. The Dutch debate about the wolf has become so charged, so I will argue, because the wolf's arrival challenges existing notions both of the nature of the Dutch landscape and of what it means to be Dutch. In the following I will discuss three dominant wolf perspectives, all of which can be seen as a mirror image of a particular conception of man's place in nature: the wolf as an intruder, as an innocent victim and friend, and as an object of management.

10.8.1 Wolf as an Intruder

One of the most visible reactions to the arrival of the wolf was disbelief, followed by anxiety and hostility. Those who fear the arrival of the wolf in the Netherlands share a few ideas.

The initial reaction of disbelief could first be heard when the wolf was found in July 4th 2013, in the midst of summer. Many journalists immediately declared the wolf to be a hoax, a typical cucumber time phenomenon not to be taken seriously. Only a few years earlier, in the summer of 2005, the Dutch were under the spell of a black puma, which supposedly roamed the Netherlands. Back then, experts could not find any proof of the presence of a large cat. But such proof came quickly in the case of the wolf: DNA-analysis confirmed that the animal that was found was indeed a wolf, and initial findings confirmed that it had been run over by a car. In its intestines, remains were found of a beaver, a species that flourishes in the Netherlands after reintroductions between 1988 and 2008; also, several wolf scats were discovered in the vicinity.[12]

And yet, despite the seemingly convincing proof, many could not believe the news, let alone embrace the arrival of the wolf as a given fact. An often heard argument was that the Netherlands is much too small and too densely populated, not just for a wolf to settle permanently, but even for a proper wolf to *want to* come to the Netherlands.[13]

Already in 2010, when the first reports appeared of wolf sightings nearby in Germany, many people had become alarmed (Vermeulen et al. 2010). In response to the large number of requests for more information about wolves, the official website of the Ministry of Agriculture, Nature and Food Quality mentioned a hyperlink to the *Wolves in the Netherlands* website. Immediately, questions were asked in parliament by some (conservative) Christian democratic politicians, who were worried

[12] Later it turned out that both findings were mistaken. A detailed autopsy revealed two bullet holes, and both DNA-analysis of the beaver remains as well as isotope analysis of the wolf remains revealed that the animal had spend its last days alive in Eastern Europe, probably Poland. More about his later.

[13] In a similar vein, in Norway some people reported that the wolves that had entered their cultural landscapes had to be hybrids, because a real wolf would never prefer cultural landscapes over wild forests full of prey (Skogen et al. 2008, 113).

that the government would enthusiastically embrace the wolf or even actively promote its arrival. They implicitly assumed that *Wolves in Netherlands* is aiming at actively reintroducing the wolves (which is not true), and feared that the government would eventually take a similar position.[14] They asked the mister if she agreed

> that the densely populated Netherlands with its many nature tourists and its many lambs, foals and calves in the spring in the meadow would be a true land of plenty, where the wolf would like to permanently establish itself and reproduce with pleasure?[15]

One of the downsides of the wolf's arrival, so the wolf critics argued, would be the animal welfare problems for domesticated animals that would result from the need to keep these animals inside at night as soon as the wolf would roam the landscape. They also asked whether or not EU regulations implied that the Netherlands should be considered suitable habitat for the wolf. If not, wouldn't that mean that wolves should be regarded as exotic, invasive animals, that could be shot on arrival. The minister responded that the wolf has to be seen as a native species as soon as it arrives in the Netherlands on its own accord.

The same members of parliament deeply believe that the Netherlands does not have room for wolves, and that giving more room to wolves would inevitably go at the expense of valuable productive farmland, which in the end is unacceptable to them.

In the 2013 debate, a liberal-conservative member of parliament explicitly asked the responsible minister to restrain from investing any money in facilitating the arrival of the wolf. He argued that because the wolf is an endangered native species, European member states have the legal obligation to help the animal survive in newly colonized habitats, provided they have entered these new habitats on their own. Worried about the implications of this European legislation, the liberal-conservatives[16] called upon the cabinet to make contingency plans that allow for shooting the wolf in case it would cause problems.

Common in all these responses to the wolf's arrival is the unreflected idea that a 'wild' animal like the wolf no longer belongs in the 'cultural' landscape of present-day Holland. This view on the Dutch landscape, which is very influential in traditional Dutch landscape conservation (Drenthen 2009a), relies on a particular conception of the cultural landscape as a legible text that testifies to the long history that humans and the landscape have in common. Seen from this perspective, the Dutch have not just conquered nature by cultivating the landscape, but by appropriating

[14] In Norway many people believed that these newly emerging wolves had to be introduced by humans, some even speculated about secret government introduction programs. Similar suspicions are voiced in France as well (Skogen et al. 2008).

[15] Aanhangsel van de Handelingen Tweede Kamer der Staten Generaal, Vergaderjaar 2009–2010, Aanhangselnummer 2215. ah-tk-20092010-2215 ISSN 0921 – 7398 's-Gravenhage 2010 https://zoek.officielebekendmakingen.nl/ah-tk-20092010-2215.html. Accessed January 18, 2014.

[16] The social democrats hold the opposite view: "'It goes well with nature in the Netherlands, otherwise the wolf would not have come this way", according to member of parliament Lutz Jacobi. http://nos.nl/artikel/527942-vvd-wolven-eventueel-afschieten.html. Accessed January 21, 2014.

the land and making it human they also installed meaning.[17] In this view, cultural landscapes are not just places that were cultivated or domesticated, but essentially *appropriated* by humans; their very meaning depends on them having been taken out of nature. To dwell, means to bestow sense on the world, and the resulting cultural landscapes derive their meaning and value from this (human) history of cultivation.[18] One of the most vocal spokespersons and defenders of this old legible cultural landscape in the Netherlands is writer and landscape activist Willem van Toorn. Van Toorn opposes the view that rewilding can be valuable to a landscape such as the Netherlands, because it will in effect wipe out the legible traces of human habitation that make the landscape meaningful.

> The type of nature that nature-builders aspire *does not have anything to tell* to humans; man is a stranger there, merely a visitor to his own landscape. […] That is why these new nature reserves have information pavilions, signposting, treasure hunts along tree species and ponds with half-domesticated otter. (Van Toorn 1998, 66)

The defenders of this view tend to see wolfs as intruders, as strangers that were eradicated long ago for good reasons, and now do no longer belong in this human place.[19] Wolves are considered intruders, that threaten the pure human character of our cultural landscape. It is no problem as long as these animals live in the outside world of wilderness, but they do not belong in our world. In that sense, they are like dirt, matter out of place (Douglas 1966). Underneath this view of the wolf is, in other words, the assumption that cultural landscapes and wild lands should be perfectly separated realms of reality. Wolves belong to the wilderness, humans belong to cultural landscapes, and never the two shall meet. Seen from this view, wolves are a dangerous threat to the purity of our humanized safe places.

A few days after the wolf had been found in the Noordoostpolder, some hunters from the region made national news with their claim that they were sure the wolf was put there deliberately. "It is almost certain that the dead animal was put there as a prank", according to a spokesperson of *Faunabeheer Flevoland*, a local hunting group.[20] Apparently, a few years earlier Polish immigrant workers had played a prank with the local press by putting a dead seal besides the road (over 100 km from the sea). To them, it was clear that the wolf was a similar prank, probably by the

[17] Cf. Kowalsky's comments on this idea in this volume.

[18] In the 1959 novel *Life and Fate* by Vasily Grossman, this view is nicely phrased by main character Viktor Pavlovich: "Man never understands that the cities he has built are not an integral part of Nature. If he wants to defend his culture from wolves and snowstorms, if he wants to save it from being strangled by weeds, he must keep his broom, spade and rifle always at hand. If he goes to sleep, if he thinks about something else for a year or two, then everything's lost. The wolves come out of the forest, the thistles spread and everything is buried under dust and snow. Just think how many great capitals have succumbed to dust, snow and couch-grass" (Grossman 2006).

[19] It is telling that many protests against wolves all over the world are directed to wolves that are framed as coming from abroad: people in the North Cascades in Washington State (USA) protest against Canadian wolves, in Norway and Sweden people protest against Finnish or Russian wolves, et cetera.

[20] http://www.nu.nl/binnenland/3524047/dode-wolf-zeer-vermoedelijk-neergelegd-als-grap.html. Accessed January 29, 2014.

same people. They must have run over a wolf in Germany or Poland, and then drop it besides the road in the middle of a large open polder in the Netherlands. The interesting thing is that most media immediately accepted the claim, it made the front page of many newspapers and was one of the first items on the national news bulletin. And yet, the only real argument seemed to be that they found it hard to believe that a wolf had actually lived there, and also that they probably 'would have noticed' its presence before. Apparently, most people are convinced that we fully control what happens in our cultural landscapes, and even more so that nothing can happen there without us humans taking notice.[21]

The most worrying thing from the perspective of those who fear the arrival of the wolf appears to be that the wolves themselves seem to ignore the very distinction between wild and cultivated land. Many people tend to think of wolves as creatures from the wild, as inhabitants of large plains and old growth forests, but research shows that wolves are perfectly able to live in (agri-)cultural landscapes. In East Germany, the largest population of 'new' wolves lives in Lausitz, a landscape that is a mix of former military training grounds and old open pit mining sites. In other words, actual wolves do not seem to mind about the difference between wilderness and culture that is so important to many people. As long as there is enough prey and there are enough hiding places, a wolf can flourish within cultural landscapes just as well.[22] But with that, wolves challenge the very foundation of the traditional view on the value of cultural landscapes, and represent a threat to the kind of environmental identity that relies on the clear separation of both domains.

10.8.2 Wolf as an Innocent Victim and Friend

As I noticed earlier, the debate about the wolf is heavily charged emotionally. This is true for those who oppose the wolf and consider it an intruder, but it is even more true for a large portion of those who want to welcome it.

The wolf is one of the most charismatic animals that exist in Europe. The last few years have seen a rapid proliferation of publications on the wolf: books, newspaper articles, documentaries, television shows. Many people feel a deep emotional connection to wolves. Many people who love their dogs, feel that wolves deserve our love even more so. In debates about the arrival of wolves in the Netherlands, especially in debates on the Facebook page of *Wolves in the Netherlands*, one can find

[21] In January 2014, a similar story was told in the German press. A hunting magazine reported that a policeman had told them that a Polish truck had been confiscated at the Polish-German border, with several wolves and lynxes in the back. The police issued a special message on January 27, that explicitly denied the claim. This was an urban myth and its most probable source was the fact that in early November 2013, a polish transporter van was confiscated with 14 stolen ATB bikes in the back of the brand "Steppenwolf". http://www.presseportal.de/polizeipresse/pm/70238/2649638/bpold-b-die-geschichte-vom-wolfstransporter-alles-nur-wolfsgeheul. Accessed January 29, 2014.

[22] http://iucn.org/about/union/secretariat/offices/europe/?14335. Accessed January 29, 2014.

many testimonies of people declaring their love for the animal.[23] Wolfs are seen as beautiful, intelligent and highly social animals that commands our utmost respect and should be defended against hostile attacks by those who hate or fear them.

In discussions about how to best deal with the issue of coming wolves, where some argue that we should at least take precautions to assure that wolves will not harm humans or human livestock, this group usually responds as if they are attacked themselves. The very fact that someone worries about possible adverse effects of the wolf seems in itself to be hard to accept for the wolf lovers.

As soon as the skeptics raise the issue of possible dangers of the wolf, the response often is an attack on the moral motives of the skeptics themselves: not only are they assumed to be afraid without good reason, or wrongly informed, but regularly the response is outright very hostile. Often, the wolf lovers assume that the critics will surely be hunters that are just out to get the wolf, and to eradicate it once more.

The wolf is seen as a victim of a hostile human culture that seeks to subdue nature and destroy strong and independent animals such as the wolf. Wolves are portrayed as victims of a civilization that is morally corrupt and hypocrite. Often, one of the stronger moral motives of these outspoken wolf lovers seems to be a feeling of commonality with the wolf. This commonality refers to the intelligence and the social nature of wolves, but also to them being a victim of civilization itself. One can frequently read statements such as "I love the wolf", "wolves are the most beautiful animals that I know", but also claims such as "I'd rather have a wolf as a friend than one of these hunters", or "all these hypocrites want is to get rid of the wolf because they like to kill anything that is as beautiful and pure as wolves".

In short, the wolf is being associated with characteristics as innocence, pureness, honesty, grace, authenticity – typical elements of a romantic view of nature. Moreover, those who see the wolf as a victim of civilization, appear to consider themselves as victims of civilization too. The very same negative attitude towards civilization as such can also be seen towards science. When the Noordoostpolder wolf was found, animal experts immediately performed an autopsy to determine the cause of death and the whereabouts of the animal. In discussions on the internet, many wolf lovers protested against this. To them, dissecting a dead wolf symbolized the disrespectful stance towards nature in general, and to the wolf as a charismatic animal in particular: even now that it is dead and killed by humans it is still not left in peace, and scientists insist of robbing the animal of its dignity just to satisfy their own curiosity. Whereas wolf lovers, at first sight, appear to be interested in a more enlightened view of what kind of animals wolves really are, they appear to have an ambivalent stance towards the very same scientists on whose specific knowledge about wolves they otherwise often rely.

In debates about the wolf's arrival one can witness another strange thing. Many wolf lovers react strongly and emotionally as soon as people point out some obvious facts about wolves that do not fit into the rosy image of them being our friends and fellow creatures. Wolves are predators, it is in their nature not only to eat meat (3–4 kg each day), but also to hunt and kill, to stalk their prey, to use their social

[23] http://www.facebook.com/WolvenInNederland. Accessed January 29, 2014.

skills and intelligence to hunt much larger animals. It may be that the average wolf prefers to eat wild prey instead of domestic animals,[24] but it is a fact that wolves *do* occasionally eat sheep. And although they are exceptional, there are known incidents of wolves attacking humans.[25] What is typical for many wolf lovers is their almost systematic neglect of the fact that these animals *do* kill, that they *are* predators. One of many popular documentaries about the life of wolves, the 2005 movie 'Living with wolves' depicts the story of an American couple – Jim and Jamie Dutcher – who single-handedly raised a wolf pack in Idaho. Although the movie sets out to show the real story about wolves, throughout the movie not one hunting scene or wolf kill is seen. The pack is fed with meat, does not have to hunt itself. Surprisingly, the movie is widely applauded as one of the best wolf documentaries that give a realistic view of wolves and shows that it is realistic to think humans and wolves can live together in harmony. Apparently, the fact that these animals are hunting predators is considered to be just an accidental character of the animals.

The upheaval caused by the resurging wolves reveals that the love of nature that some feel when confronted with wolves, rests on a view of nature that is highly problematic. The particular kind of love for wolves that one can so often see, seems to rest on a decontextualized notion of wolves, in which the understanding of wolves is separated from the landscape in which they live. It is easy to have strong feelings of respect for a majestic animal such as the wolf, but it proves difficult to combine this respect with a simultaneous acknowledgment of their function as top predators within an ecologically context. As soon as one considers wolves as animals that do not live in isolation, but as functioning members of an ecological community, as 'emplaced' parts of an ecosystem, one will have to acknowledge that being a predator is a key characteristic of wolves.[26]

In other words, those who explicitly love wolves seem to have a similar problem as the wolf haters we discussed earlier: both groups have difficulty to acknowledge the place of wolves within the landscapes that we also inhabit.

10.8.3 Wolf Management

Both wolf haters and wolf lovers appear to find it difficult to acknowledge the wolf in all its relevant features as part of our landscape. Those who regard the animal as an intruder feel threatened because the wolf challenges the very distinction between

[24] German studies show that the diet of the average wolf in Germany consists of less than 1 % of domestic animals. http://www.nabu.de/aktionenundprojekte/wolf/hintergrund/15572.html. Accessed January 29, 2014.

[25] See Thorp in this volume for a detailed account of a wolf attack in the Netherlands in early nineteenth Century.

[26] In *Nature Wars*, Wall Street Journal reporter Jim Sterba argues that the contemporary love of nature among urbanites and inhabitants of urban sprawl is based on a too rosy, detached view of nature and tends to forget about potential wildlife conflicts. For Sterba this means that the comeback of wildlife, "that should be an animal lover's dream come true" will often inevitably "turn into a sprawl dweller's nightmare" (Sterba 2012).

culture and nature that forms the basis of this particular outlook on life. The wolf lovers on the other hand seem to rest their love for wolves in the simply neglect of what is arguably one of the key characteristics of a predator. Both parties seem to be blinded by their particular outlook on nature that is determined by particular ideologies and human desires, rather than by a realistic approach to the wolf as an animal.

For this reason, many feel that the most important thing to focus on to help the debate is to separate fact from fiction, and to fight prejudices and preconceptions about the wolf that are not based on facts. People's attitudes towards the wolf, their feelings and expectations regarding its behavior, are determined to a large extend by irrational emotions and cultural prejudices about the wolf – this is known as the 'Little Red Riding Hood syndrome.' *Wolves in the Netherland*s and others who want to accommodate the arrival of the wolf, firmly believe that it is essential to properly educate the public about what kind of animal wolves really are.[27]

The key of the 'wolf management approach' is that we should teach ourselves to look at wolves objectively: in essence, the wolf is just another 'normal' animal. If we want to be able to live together with them, we should seek a sober, rational and realistic approach, separating facts from fiction. Scientific research projects and careful monitoring of wolf behavior, help to gain a detailed view of what to expect. Educational programs for specific stakeholder groups such as livestock breeders and shepherds can help find pragmatic solutions to practical problems: finding ways to prevent damage to livestock and think through financial compensation measures. The assumption is that if we adopt such a rational approach, it should be possible for a modern rich country like the Netherlands to change its policies in such a way that wolves can coexist with humans. Solid public communication about wolves is seen as essential, notably through social media, mass media and public talks, but also by publishing scientific reports about wolves, to counteract the 'Little Red Riding Hood syndrome'. Wolf managers emphasize the need to recognize the real wolf as an ambivalent being that will have both advantages and disadvantages, and promote a pragmatic, matter-of-factual treatment of damage and feelings of uneasiness.

Most wolf experts stress that the wolf is very shy animal, that will try to avoid contact with humans. The chances of seeing one are therefore very slim, and the chance of a dangerous encounter are even less unlikely. On the contrary, one should feel lucky if one were ever to encounter a real wild wolf. Most wolf promoters also stress that the arrival of the wolf will have its advantages: wolves can play an important role in regulating the ecosystem. Experiences in Yellowstone are being used to argue that wolves will have all kinds of positive effects on the ecosystem.[28] Wolves can enrich species diversity by regulating the numbers of

[27] This combination of awareness-raising programs, stakeholder involvement and public education is very much in line with LIFE, the European Union funding programme for the environment (Silva et al. 2013).

[28] A stirring video about wolf reintroduction in Yellowstone National Park, 'How wolves change rivers', narrated by George Monbiot, even went viral on the Internet early 2014. See: http://www.youtube.com/watch?v=ysa5OBhXz-Q.

herbivores, not so much by eating them, but by changing their grazing patterns and thus effectively reducing the amount of available food resources. The fact that wolves are out there to hunt will cause herds of deer to change their grazing behavior, since they will avoid staying in an open area for too long. This is called the *ecology of fear*. Arguably, there is something paradoxical to the attempt to manage the wolf case by playing down potential conflicts: the very same people that stress that we do not have anything to fear from the wolf, also stress that fear for wolves is an essential part of their meaning for the ecosystem. This *paradox of fear* makes us aware of the limitations to the strategy of normalization that seems so important for wolf management.

Although the approach of *Wolves in the Netherlands* and others was inspired by positive experiences in Germany, and is in line with the European Union policy regarding carnivores (Silva et al. 2013), the approach also fits perfectly in the Dutch tradition of dealing with issues of public policy and special planning. Much in line with this tradition, the Dutch authorities had already begun preparing the country for the wolf's arrival long before the first wolf arrived. In 2012, Deputy Agriculture Minister Henk Bleker commissioned a 'fact finding study' (Groot Bruinderink et al. 2012) and a 'appreciation survey' (Intomart 2012), and in September 2012 the decision was made to write a 'wolf management plan' that would be designed together with relevant stakeholder groups. But when the Noordoostpolder wolf was discovered, many local policy makers discovered they were unprepared, and asked for protocols that will tell them what to do in case a wolf shows up in their constituency (Mudde 2013). Pressure is on to finalize the 'wolf management plan' soon, but, the Noordoostpolder wolf case with its surprising turns (at first the wolf was thought to have come by itself, then it turned out it had been put there) seems to have slowed down the process of finishing the final report (Trouwborst 2014). Nonetheless, several meetings have already been organized by order of the ministry for nature affairs (Groot Bruinderink et al. 2013). As part of one of these meetings, in November 2013, a series of role playing games were held with the participants, playing out several possible scenarios of wolves returning to the Netherlands. The goal of these role plays was to discuss with all parties involved what should be done as soon as the first wolves would finally settle in the Netherlands. How should local authorities act when the first dogs are being attacked by wolves? Who should call who? What authorities will be responsible for what? Should there be a quick reaction force? How do deal with media attention?

One of these role playing games focused on the question what would happen if wolves would form a 'pack' for the first time in over 150 years. A training actor who played the role of a forest warden was handing out toast with sprinkles (the traditional treat served to guests on a maternity visit) to visitors to celebrate the birth of wolf puppies. The warden complained that it was difficult to handle the large numbers of amateur photographers that were overrunning the forest in an effort to get a glimpse of the animals. A part of the forest was fenced off with barrier tape, to provide the animals with a quite spot. An improvised sign warned visitors they should keep their dogs on the leash 'for the dog's own safety' (see Fig. 10.2).

Fig. 10.2 "Dogs must be leashed fog for their safety"; Role play about the Dutch Wolf plan, November 2, 2013 (Photos: Martin Drenthen)

Some of the participants of the training session raised the issue whether or not this was a realistic case – many had difficulty believing that this could really happen in a Dutch forest in the foreseeable future. But if it would, should we really decide to fence off the area to give the wolves some quite? 'Why don't we trust the wolf's judgment? Aren't we being too paternalistic?', one participant asked. If the wild mother animal herself had decided that this place was quite enough to give birth to her cubs, why should we know better? Are we really concerned for the wolf, or are we actually concerned for ourselves? Might it be that we are afraid to let go of control in our desire to 'organize' and order our relation to nature, too obsessed that the wolf's sudden arrival might cause a breach in the well-ordered Dutch landscape in which everything, even nature, is neatly placed in a predetermined order? Wouldn't this amount to a reduction of the wolf's wildness, an effort to 'normalize' it and making it part of our orderly all-too-human world (Birch 1990)? By not trusting the wolf's judgment, so this participant suggested, we are denying the wolf's dignity as a *wild* animal.

The attempt to manage the wolf case rationally and detached from emotion, was being criticized for being negligent to the meaning of a wolf as independent and autonomous. It turns out that not just the assumptions of ordinary 'ignorant' lay people are in need of reflection; the experts of professional conservation and preservation, with their emphasis on knowledge and rational thought may, too, be blinded, maybe not for the 'real', 'factual' wolf, but for what the wolf *stands for*. They implicitly share the assumption of the wolf haters and wolf lovers that wildness – as disorder – does not have a role to play in the Dutch landscape.

Many conservationists, wardens and nature and wildlife managers see themselves as representatives for nature's interests. They see it as their task to prevent human-nature conflicts and try to have a good relationship with their neighbors, all in an attempt to ensure that nature conservation will have public support. The discussion at the role play made some conservationists recognize that there is something deeply problematic with their sometimes almost obsessive attempt to manage human-wildlife conflicts. The possible arrival of the wolf is challenging the very ambition underneath their attempt of wolf management.

The Netherlands is known as a country with one of the best organized and well-ordered spatial planning in the world. Accordingly, each newly arrived species is also being met with planning, contingency plans, stakeholder meetings and legislation. Some believe that the Dutch reaction to the possible arrival of the wolf shows that the Dutch simply have lost the ability to tolerate disorderly things. In Belgium, for example, a very similar wolf-situation exists, but there one finds a much more nonchalant attitude regarding the possibility of wolves in their country.[29]

The attempt to regulate the wolf with a management plan might be seen as a forced attempt to 'normalize' the wolf, and to impose order on the wildness nature. Underneath the wolf plan seems to lie a fear that the wolf will not be controllable, that it can destabilize society by causing social conflicts, and force us to change our lives. Yet, by trying to avoid human-wildlife conflicts, nature is also robbed from its ability to show its teethes, to seriously confront us with that which lies beyond our control. Wolf management seems ill equipped to recognize this 'transcendental' meaning of the wild wolf. Yet, much of our fascination for the wolf rests precisely on this wildness: especially in a well-ordered, overly-ordered landscape as the Dutch, the wolf represents something other that we fear and long for at the same time: an animal that is truly wild, that resists our all-too-human orderings. Wolves are symbols of the return of vital nature, and represent that part of the world that transcends our control. This also means that fear of wolves is an essential part of our fascination for them. By easing the tension and playing down possible threats, wolf managers risk losing the very element that distinguishes wolves from 'normal' animals.

For many reasons, it may be wise to be on our guard not to protect our cultural prejudices against wolves, and adopt a rational and pragmatic approach to wolves. But the attempt to rescue the real animal from the imaginary, can blind us from the fact that there are strong symbolic meanings attached to the animal. Some emotionally charged meanings are not based on a lack of understanding, but rather inform us of the significance these animals have for us. Resurging wolves throw us back on ourselves and put in perspective our taken for granted human power over nature.

[29] Glenn Deliège has pointed out that, whereas the Dutch can only do their best to come up with ever better regulations and policies to deal with disorder, the Belgians seem to have a 'mental space' for those phenomena that escape classification and order, and seem much more at ease with the fact that certain things resist control. In other words, the Belgians seem to still have mental space for a *surplus* of meaning, or transcendent meanings of nature. Belgians tend to laugh at the Dutch obsession with order (Glenn Deliège, personal communication). Earlier (Drenthen 2009b) I have discussed the role of 'mental space for transcendence' in terms of wildness and taboo.

Wolf management will be useful for making people recognize that the systematic eradication of wolves may have been a mistake, that the return of wolves will have advantages in terms of ecology and even aesthetic experiences of nature, and that at the end of the day it may be just fair to give the wolves more room. But the emphasis on these rational considerations should not blind us for recognizing that one of the most powerful reasons for people to become fascinated by wolves and argue for wolf protection lies in their very wildness.

It is an undeniable fact that wolves *somehow* 'belong' in this country, and it is this fact that is disquieting and uneasy to some, and fascinating to others. In any case, we are forced to rethink what it means to live in this landscape.

10.9 Conclusion: Living in a Still Wild World

In the Dutch wolf case, we have encountered at least three different perspectives on the wolf, all of which reflect not just an image of what the wolf is, but also about how one should deal with the landscape, and what a proper role of humans within nature might look like. The resurgence of the wolf presented all of these perspectives with a challenge, but basically the issue at stake is always the same.

For those who consider the wolf as an intruder in the cultural landscape, the spontaneous resurgence of the wolf means as breach in the comfortable separation between wild lands and cultural landscape. If wolf behavior shows that the clear separation between nature and culture does no longer exist, than, the idea of humans being the guardians and stewards of the domesticated world is undermined; we are thrown back into nature. The wolf confronts us with the fact that, despite all our efforts, the world still contains wildness that cannot be controlled.

For those who regard the wolf as innocent victim of modern society and a potential friend, the possibility of human-wildlife conflicts in itself presents a challenge. It is easy to love a beautiful animal that we will never run into conflict with, but as soon as we share the same space, conflicts cannot be excluded. As long as we are used to living separate lives, we can ignore the presence of a predator, but when we share the same space, we cannot. Love for wolves cannot be easy; what is more, a too rosy picture of wolves, fails to do justice to their very nature as predators. The acknowledgment of the wolf's predatory nature is a prerequisite to recognizing it as a real animal that occupies our spaces.

Finally, from the perspective of wolf management, the resurgence of the wolf confronts us with our desire for control, not only control over nature, but also control over nature within us, our own emotions. Wolves force us to recognize that in our desire for control, we lose sight of the unruly in nature, the unruly that confronts us with our limitations and finitude, that puts at stake the image we have of ourselves, but that at the same time also forms the basis of a deep and profound fascination for the vitality of nature (Drenthen 2005).

The wolf confronts us with the fact that our domestication of nature has only been superficial, that the world is and has always been a much wilder place that we

thought it was. The possible return of wolves in landscapes where they were thought to have gone extinct forever, puts ourselves at stake and challenges existing notions about ourselves. The uneasy truth of the resurging wolves is that we have forgotten what it means to live in a world that remains to be wild. At stake is the issue *who we are* in this still wild world.

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Chapter 11
Eating Wolves

Thomas Thorp

Nature and teaching are similar, for teaching changes a man's shape and nature acts by changing shape.

(Democritus B 33)

11.1 Old World Wolves

An old story indeed, one that takes place in the Greek region of Arcadia, a land whose very name evokes wildness, the life of the hunt, and since at least the Renaissance, pastoral idyll. In Greek and Roman mythology Arcadia takes its name from Arcas, the son of Zeus by Callisto.

Callisto was a nymph in the service of the goddess of the hunt, Artemis. And she loved only Artemis. So in order to capture Callisto's affections Zeus disguised himself as Artemis, and the resulting child was Arcas. Always jealous of Zeus' lovers, the angry Hera transforms Callisto into a bear. Or, on Hesiod's telling, it is Artemis herself who discovers that Callisto is with child and angrily transforms her into a bear. Arcas then hunts his own mother driving her into a cave, or in another telling Zeus saves Arcas by hiding him in a cave, in the land that would become Arcadia.[1]

Arcas, the hunter, son of Zeus, lives in peace in Arcadia until one day his grandfather, King Lycaon (*lykos*, Λύκος, Greek for wolf) decides to test Zeus' power by killing Arcas then roasting his flesh and mixing it into a dish. Lycaon, King of Arcadia,

[1] The connection with bears is confirmed when, in most every version of the story, Callisto and her son Arcas are finally transformed into constellations: Callisto is Ursa major (the big dipper) and Arcas is Ursa minor.

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serves Zeus the dish causing Zeus to (unknowingly) eat his own son, his own "flesh and blood" as it were. Enraged, Zeus punishes Lycaon by killing his other sons and transforming Lycaon into a wolf.

11.2 New World Wolves

In October of 2013 a photograph of a wolf, taken by a hunter, began to make its way around the internet, as photographs do, being shared by like-minded bloggers.[2] Now removed, taken down from its original site on the Facebook page of a Wyoming outfitter[3]—where it stood above a caption reading "Fed up in Wyoming"—the photo places us in a mixed pine forest with a dusting of snow on the ground, probably in an area just outside the southeast border of Yellowstone National Park. What the photo depicts is a group of eight individuals carefully posing for the camera in camouflage hunting gear. Two of them are kneeling, five of them are holding rifles, although only one of the rifles appears to be fitted with a scope.[4] They are holding up for display a large unfurled American flag and next to the flag, also held up for display, a large dead wolf (Fig. 11.1).

This display of a dead wolf was a political taunt, a metaphoric lynching of a Yellowstone wolf in a region where the wolf has come to symbolize a deeply polarized political culture. In 1995 and 1996 wolves captured in Canada were introduced into Yellowstone Park under special experimental provisions of the Endangered Species Act. One of the characteristic elements of wolf-loathing rhetoric is the epithet "Canadian" to describe the Yellowstone wolf population. The assertion is correct. Yellowstone wolves were not designated an endangered species and then granted protection, and this is because, having been exterminated, there were no Yellowstone wolves, or at least no established breeding pack, and so the reintroduction of wolves was accomplished by importing Canadian grey wolves. A number of naturalists joined those opposing wolf reintroduction contending not that they did not want to see wolves return to the Yellowstone, but that there was a strong likelihood that given ESA protection indigenous wolves would repopulate the Park on their own. Instead, the political decision was made to import wolves from Canada under a special provision. Unlike indigenous wolves that would be protected absolutely under ESA provisions, the imported experimental population could be "managed." That means that under provision 10(j) wolves could be culled or killed if they left the Park. Be that as it may, the suggestion behind the epithet "Canadian wolves" is that

[2] The photo was featured prominently on the blog-site *Earth Island Journal* with a thoughtful commentary by James William Gibson: dated October 28, 2013 (www.earthisland.org).

[3] Outfitters are licensed guides who hold a concession that gives them the right to set up a tent camp on Federal land (a National Forest or a Wilderness area) and then, for a substantial fee, to bring less-experienced hunters in on horse-back, feed and house them, and direct them to where they are likely to have the chance to shoot a "trophy" (a large bull elk or moose for example).

[4] In order to be used for hunting elk or deer a rifle is fitted with a telescopic scope. The fact that the rifles in this photo are not scoped suggests that only one of the displayed rifles has recently been used for hunting.

Fig. 11.1 "Fed Up in Wyoming" (Reproduced here under Fair Use) (Accessed January 10, 2014 from Earth Island Journal: http://www.earthisland.org/journal/index.php/elist/eListRead/sorry_but_wolf_slaughter_is_not_american/)

these wolves are foreigners, brought in to "our" lands from somewhere else; and now they are ruining our economy. The political overtones are too clear to require elaboration, except to add that what many Westerners fear from wolves runs directly parallel to what they fear from immigrants, mostly Hispanic, and is captured in the oft repeated phrase: "they (wolves/immigrants) have more rights than we have."

Despite the early doubts of many—and confirming the early fears of many more—within less than a decade the wolf population had grown to a level beyond the carrying capacity of the Park itself. Wolves, who had never bothered to respect the Park's borders anyway, now began to populate the National Forests that surround the Park exacerbating and personifying existing tensions between public land advocates and private landholders in the region.

In fact the wolf repopulation efforts were successful enough that by 2008 the U.S. Fish and Wildlife Service began the process of rescinding the "endangered" status or "delisting" the Yellowstone area wolf population, a determination that would then require each state to submit plans to "manage'" the wolf populations, including those on Federal lands, inside its borders; plans that would rely on hunting the wolves. Yet even in the face of growing public anger directed against the wolves on the part of a significant sub-section of the regional population those initial delisting efforts were unable to clear the courts where federal law and basic science still had the power to trump political pressures.[5] Proof of the power of this

[5] See, United States District Court For the District of Montana, Missoula Division, Document 164, ruling filed 08/05/10. Judge Mallory rules that through the ESA Congress expressly forbids treating an endangered or threatened population as divisible, but must assess the health of the population as a whole. Mallory therefore voids the Dept. of Interior plan to allow delisting in Montana and Idaho while retaining endangered status in Wyoming, and he rules that the entire Northern Rockies population be relisted.

public enmity toward wolves is that it was able to force a sitting Democratic Senator from Montana and a Democratic President of the United States to ignore the science and even to bypass the courts in response to its pressure. In April of 2011, President Obama's Secretary of the Interior, Ken Salazar, welcomed a rider to a last-minute, must-pass budget bill that simply removed the wolves of the Northern Rockies from any consideration under the Endangered Species Act. This unprecedented gesture whereby a regional population of a single species was simply removed from ESA purview by legislative fiat testifies to the ferocity of the sentiment and the political power behind the hatred and loathing directed against the Yellowstone wolves. Under the experimental population provisions through which they were introduced, wolves in the region had regularly been culled, shot, by agency officials, but by 2012 wolves were being legally hunted, by the public, in all three states.

And yet the establishment of hunting seasons has done little to quell regional public anger at this decades-long successful and purposeful campaign to return to the northern Rocky Mountain region of the American West a predator population that had been exterminated a century before. Even though in most of Wyoming, for example, wolves can be shot on sight, without even a hunting license or tag, as if they were vermin, the declaration of open season on wolves has seemingly only enflamed what has become, for a significant sub-section of the region's population, something close to a sacrament: the public gleeful celebration of enmity—what I'm calling *hyperbolic wolf loathing*—having become an outward and visible sign of an inner state of spiritual grace.

And lest that diagnosis itself should appear to be an instance of hyperbole we need only return to the infamous photo, taking note of the fact that the eight individuals prepared themselves to pose for the photo of a dead wolf displayed alongside an American flag by donning white masks under their hats or caps. All eight of the individuals are wearing some form of a white mask redolent of, and no doubt also representing, the white sheets worn by the Ku Klux Klan.

11.3 Becoming Wolves

I begin an essay with the ambiguous title "Eating Wolves" (wolves that eat, wolves that are eaten) through this juxtaposition of an old world story about Arcadia and a new one about the Yellowstone in order to suggest that something strange is going on here between wolves and humans, but also to suggest that however strange, it is also somehow quite familiar. There is something at once Paleolithic and absolutely contemporary about our representations of wolves, or, to put the point from the other side, there seems to be something about the wolf that makes it an ideal canvass for our own acts of self-representation.

This act of self-representation that passes through the body of the wolf is as strangely familiar as metamorphosis, or as the texture of one's own flesh: the strange juxtaposition in the photo of a dead wolf held up beside the American flag evocatively replicating the punishment meted out by an (unknowing) god tricked into

Fig. 11.2 Jupiter (Zeus) turns Lycaon into a wolf. Iconotheca Valvasoriana, by Hendrik Goltzius (1558–1617)

eating his own son's flesh; *namely that in each case the perpetrator becomes the wolf*. But there is a difference.

In Lycaon, the predator-King is transformed into the wolf that, as his name suggests and by virtue of his vile deed, he has already become. But it is essential to this Old World story that he is punished because he succeeds. Lycaon is transformed into a wolf by a god (Zeus) who is angry because Lycaon in fact won his wager; he fooled Zeus. Zeus is angry because he was tricked and it was possible to fool a god because, as Lycaon wanted to show, the old world gods are not omniscient. The Olympian gods are subject to hatreds and even fears. They are jealous gods adrift in a world that is still an unpredictable wilderness. In this world wolves are feared (Fig. 11.2).

In the photo the wolf is displayed next to the flag it ostensibly threatens, by his predators, who depicting themselves as a militia force opposing the very government their flag stands for have now become the armed predators they accuse the wolf of being. Here however the metamorphosis from hunter to wolf takes place in a cultural realm defined not by the uncertainty and the unpredictability of wilderness but by a New World political economy that has redefined the earth as a transparent sphere of exploitable resources. The Modern world of internet transparency is grounded in a techno-logic that imagines itself to be omniscient. Indeed the pretense to omniscience goes hand in hand with the conviction that, unlike the old world gods, our gods cannot be fooled. Ours are angry gods who justify their claims

to technological omniscience by transforming the earth into terms those logics can in fact penetrate. In this Modern world with its godless pretensions to omniscience, only the wolf resists. In this world wolves are hated.

Although these categories might appear at first to be clumsy—the term New World serving to mask the annihilation of an old world that was already in place when settlers from the Old world arrived in the New one—this ambiguity is actually quite profound and anything but accidental. Allow me to translate the term Old World into a fear of wolves, and the term New World into the hatred of wolves. And then let me suggest that employed in this way the "old" is not prior to, nor is it the origin of the "new." The new hatred of wolves is not an effect, nor is it a Modern form of an old fear of wolves. We are strongly inclined to presuppose just such a causal relation between a threat (fear) and a response (hate) and it is that inclination that needs to be examined and reconsidered if we are to comprehend the hyperbolic wolf loathing in the Yellowstone region.

What else might old and new mean, if not the logical and temporal continuity of the old to the new, of what comes before (the cause) and what comes after (the effect)?

As those who work in the areas of conservation and preservation in whichever "world" know full well every attempt to establish a starting point or to define a natural condition for any particular place on the face of the earth and every attempt to justify preservation or restoration (of a landscape or a species) on such a basis is confounded. The "old" just refuses to stay in its proper place as that which, because it occurred before, underlies the "new." Restoration and conservation efforts are confounded by the fact that the familiar image of sedimentary layers of geologic and historical time, where the old occurs before and thus subtends the new, fails to capture or express what happens when human beings lay down meanings.

What we know and can demonstrate to be true according to the logic of the natural and social sciences simply does not define the rationality at work in the sedimentary process that is the construction of meaningful human history. When humans make sense of themselves and their world, the representation of a given state or condition often seems to precede the event, and then, even more mysterious from the perspective of the social sciences, the very act of meaningful re-presentation transforms or alters the state or condition both of the "original" event and of the one who represents it. We would do well to attempt to respect that complexity as we turn to an analysis of hyperbolic wolf loathing in the Yellowstone region.

11.4 Hating Wolves

There is, let's stipulate, something like a primordial fear of wolves, but the most reasonable view would seem to be that it is only incidentally a fear of wolves. It would be, it seems, a biological disposition to self-preservation that is stimulated in the presence of any predatory threat. Yet I am arguing that this sort of analysis is wrong on two counts. First, while we may certainly use the word "fear" to refer to

a biologically grounded stimulus-response, I suggest that human beings have access to that process only through its meaningful re-presentation. We must represent any thing or event *as meaningful* simply in order to experience it. And I am arguing, second, that the sort of hyperbolic loathing of the type we observe in the Yellowstone region can't be explained any other way. Hyperbolic loathing is neither an effect of fear nor a state of excessive fear. It is, rather, an affect that accompanies the re-presentation of fear and is thus properly understood as a form of hatred.

In other words hatred or loathing, I want to suggest, is not a stimulated response to a present condition (the presence of a predator) but is, rather, a formal quality of the re-presentation of that threat. This does not mean that there is no such thing as fear in the form of a stimulus-response but it means, rather, that the juxtaposition forms a palimpsest—the old text erased or overwritten but still evidently visible beneath the new—a complex overlaying of meanings and biological dispositions.[6] And since every such act of re-presentation is also a *self-representation*, the reordering of the priority of the threat to its re-presentation means that the biological event (stimulus-response) withdraws in favor of its representation. Furthermore this account that depends on the reordering of the event and its re-presentation holds out the promise of actually being able to account for the critical feature of the phenomenon we are examining, namely the hyperbolic quality of the wolf loathing. It holds out that promise because the account that reorders the relation of the event to its re-presentation also requires a moment of simultaneous self-representation. This act of self-representation is the actual medium of the process we are describing. I cognize the event when I render it meaningful and I cognize meaning when I take it, re-present it, "as" the thing it is, an act of re-presentation that is also necessarily an act of self-representation. This moment of self-representation is affective (I see myself "as" this or that, in this or that way whenever I make sense of any event) and that means it can account for the affect that is the hyperbolic feature of the phenomenon we are examining. In other words this account of cognition that involves self-representation has this advantage over the traditional causal-temporal account, that in the course of simply experiencing the world the knowing-acting agent is at the same time affected and thus transformed. That the experience is transformative without being causal will turn out to be the keystone in drawing together these claims into a coherent account of hyperbolic wolf loathing.

But surely the simplest hypothesis to explain the sort of hyperbolic wolf loathing featured in the photograph I've described requires no deep philosophical examination of human representation. Why not simply focus instead on specific features of the local economy, namely the significance of hunting in the region and especially the organized political lobbying by those industries that depend upon unfettered access to public lands: the stockgrowers (sheep and cattle) and the outfitters who guide hunters?

[6] For the image of the palimpsest I am obliged to Martin Drenthen who has employed it to positive effect in presentations where the fundamental duplicity of the landscape "text" was at issue (cf. Drenthen 2013).

Were my purpose to analyze the legible surface of the problem, that would be the course to follow. But as I'm about to demonstrate, while both the scientific and the political-economic analyses are critical to comprehending hyperbolic wolf loathing, the goal of this reading is to discern through those legible and familiar scripts the dimly preserved subscript that is underwritten there, the *scripto inferior*, namely the meaning of the mystery itself. There is, again, something strange going on in our representation of wolves. Hyperbolic wolf loathing is not just one more instance of an irrational political attitude in which the wolf serves as a palatable public surrogate for a less palatable set of economic interests.

In the first place there is nothing irrational about it. Those who view the public lands of the Yellowstone region as open range for their cattle or sheep, or as raw material for economic exploitation (mining, lumber), those agents *should* hate and resist the wolf because the reintroduction of wolves goes hand-in-hand with efforts to redefine those same lands not as exploitable resources but as habitat for wild creatures. The wolf comes with an agenda, that the public lands of the area be considered not as raw materials for local industry but as a public good. And so it is certainly true that the industries of the region gin up irrational public fear of wolves in order to advance their interests in controlling public lands in the region. But the question this political observation misses is precisely the question we have set out to examine.

If hyperbolic wolf-hatred is not simply a form of fearing wolves, but is instead a quality of the re-presentation of that fear then if follows that hyperbolic wolf loathing is not about wolves; it is about humans, and about how humans represent wolves. But neither is that re-presentation simply a social construct, a belief or attitude. Human beings make sense of their world and render it meaningful through a process that not only parallels, but is paradigmatically expressed in, a peculiarly human form of the fear of predation.

The radical thesis I want to test is that the act of self-representation that accompanies our cognition has as its originary formulation a specific version of the fear of predation: the fear of being eaten alive. This is a claim that appears to be inconsistent with my argument that hatred of wolves is not an expression of the fear of wolves. The contention I hope to establish is that the fear of being eaten alive is not a fear of the predator, not a fear of wolves, but a feature of the re-presentation of that fear.

11.5 Doubling Wolves

In their masterful compendium of the scientific research on wolves Mech and Boitani (2003) reserve the penultimate chapter for a survey of what science can tell us about "Wolves and Humans" where we read:

> Ultimately, the wolf exists in the eye of the beholder. There is the wolf as science can describe it, but there is also the wolf that is a product of the human mind, a cultural

> construct—sometimes called the "symbolic wolf"—colored by our individual, cultural, or social conditioning…This wolf is the sum total of what we believe about the animal, what we think it represents, and what we want and need it to be (Fritts et al. 2003, 290).

So there are, it seems, two wolves, one based in facts and known to the sciences, (*Canis lupus*) and its double, the product of beliefs and fears that I'll refer to as *the Wolf*. And yet,…

> What people choose to believe about wolves can be more important than the objective truth, or at least those beliefs can have a greater effect (ibid., 290).

It is because this last claim is undoubtedly true that it is so important to insist that its formulation is not. That is, it is undoubtedly true that "what we believe about wolves [the Wolf] can be more important than the objective truth [*Canis lupus*]." In fact that phrase constitutes a fine definition of the very phenomenon we are pursuing: hyperbolic wolf loathing would seem to consist of a constellation of beliefs or attitudes about wolves that are both apparently disconnected from and more important than the objective facts about wolves. And yet my suggestion is that because it is saying something importantly true about the difference between wolves and the Wolf, we will fail to comprehend the critical phenomena so long as we think in terms of a distinction between objective truth and mere belief.

Notice, in fact, that the standard thesis regarding the difference between wolf fact (*Canis lupus*) and wolf belief (the Wolf) is already troubled insofar as it appears to be advancing two seemingly contradictory claims. First there is the claim that human beings are evolutionarily predisposed to fear predators even though those threats are in fact prehistoric. We are, they say, "biologically prepared to acquire and retain adaptive biophobic responses to certain natural situations and stimuli that contained some kind of risk in former times" (ibid., 290). So here we have the traditional logic of event and representation grounded in what presents itself as a fact of our evolutionary biology: because our ancestors were subject to predation, the fear of predation is inscribed into our bodies, a ready response waiting to be stimulated by the presence of a threat.

Unhappily juxtaposed to this first claim advanced on behalf of the biological sciences is a second claim, supported by social-scientific surveys, which show that wolf loathing is tied to specific political and economic factors:

> In the western United States, wolf restoration is inextricably linked to a long-standing debate over how federal land is used…Government is widely distrusted, perhaps especially by rural people. There are fundamental differences in the way urban and rural people in the West view nature (ibid., 296).

In fact it is possible to expand this argument beyond the bounds of the American West. And when we do, when we look at the history of wolf loathing by juxtaposing the Old World and the New, we come upon a rather surprising general finding. There seems to be a paradoxical relation between the degree of threat represented by the wolf and the degree of loathing directed toward the wolf (Lopez 1978; Coleman 2004).

This predation paradox is most generally evident if we focus, first, on the most dramatic of threats, the predation of wolves on humans. Unlike in Eurasia where wolf-human predation has long been a matter of historical record and, in areas, remains an acknowledged fact of life,[7] in the New World there was—in a phrase so ubiquitously repeated that it became a defining feature of wolf restoration debates in the United States—not a single documented case of healthy wolves killing a human being in the recorded history of North America.[8] And yet the regional organized and hyperbolic antipathies characteristic of the Rocky Mountain West where wolves do not kill people is unmatched in the local traditions of areas in which wolves have eaten humans.

Perhaps then the hyperbolic loathing is not simply an advanced form of an underlying biological condition, not an extreme expression of fundamental fear. Or to state the same reservation in the terms employed by the wolf-scientists, perhaps beliefs (about wolves) are not simply responses to complex social-economic factors, which are deposited somehow in the culture in the same way that biological dispositions are deposited in the organism. This much should be clear: those two contentions are self-reinforcing. That is, the opposition between objective facts and mere beliefs follows the same materialist and deterministic logic as does the depiction of wolf loathing as a hold-over biophobic response inscribed in our biology.

Even if we were to invoke here the oddly Lamarckian thesis cited in Mech and Boitani to the effect that a "biophobic" disposition to fear predation is somehow genetically passed down from a time that it was to a time when it is not rational to fear being eaten by a wolf, one ought to expect that the expression of this primordial fear would be consistent and that where there are wolves there would be fear and hatred of wolves. Instead, studies confirm that in North America, and in the American West in particular, while the levels of wolf-loathing are higher the closer the proximity of wolves, they also show that wolf-loathing goes off the scale ("up to 90 % disapproval") in the case of farmers and ranchers no matter their proximity to wolves (Fritts et al. 2003, 295). To these disparities regarding the relation of attitudes to the presence of real threat add the problem of the hyperbolic quality of those same attitudes and the biophobic account begins to appear somewhat problematic.

[7] For a comprehensive survey of wolf-attacks on humans see Linnal et al. 2002. Because it was published in 2002 the study does not include two recent cases of of wolves killing humans in North America.

[8] The fact that two well publicized cases of wolves attacking and killing two people in North America may have punched a hole in the previously spotless record of North American *Canis lupus* (not a single documented case of healthy wolves killing a human) has by no means altered the battle lines of the debate. On the one side those two cases have been taken up and voraciously consumed by a range of policy advocates hungry for any morsel of evidence in favor of their wolf-loathing campaigns. And, on the other side, the desperate need to defend the frankly absurd universal negative (never a single case in recorded history) appears to matter more than the policy recommendations that might emerge from the recognition that the wolves of North America may be learning to prey on humans.

And this is exactly why the appeal to the political-economic "soft" data is brought into the discussion. There is a profound biophobic response but it is, we are to understand, stimulated or mitigated depending upon social conditions and economic variables. This is indeed the standard approach to these sorts of complex human and social phenomena and, as can be illustrated using our example of hyperbolic wolf loathing, the standard approach—one that views humans as essentially biological organisms, but with an additional social-political or "cultural" complexity added on—is inherently problematic.

The standard thesis says that the key to understanding wolf-loathing is evidently not actually the fear of predation at all, but a rational though disguised expression of political and economic self-interest. And yet if the "biophobic" account is too generic so too is this appeal to disguised economic self-interest. Why the disguise? And why wolves? If the Wolf is a symbol of an explicit interest then why dilute that interest by taking the misdirection through the public demonization of wolves? And if the answer is that wolves are ideally suited to play this symbolic role because local people who may not even share those economic interests will be nonetheless inclined to side with the industries that rely on unregulated access to public lands because humans fear wolves, then the explanation becomes both circular and viciously so: we don't really fear being eaten by wolves, but the Wolf symbolizes what we do in fact fear (the imposition of federal control over our economic interests) because…well, because we fear being eaten by wolves.

Now it is perhaps unfair of me to taunt the argument since, clearly, something like this is exactly what is going on here. But the problem with the standard thesis is that the biologistic reading of the fear of predation warps and distorts our ability to comprehend the political dimensions. The standard account draws its validity from the supposition that the medium of the communication of fear is biological, but that means that the account is also deterministic and that means it has trouble accounting for variations of effect. More fundamental, however, is that by being deterministic the account is forced to read responses as effects. The transformational or hermeneutic features of human meaning-formation (where the transformation in "beliefs" is partly a product of the agent's activity of self-representation) are lost altogether.

11.6 Terrifying Wolves

So lets try a different approach, one that begins by recognizing that attitudes and deeply-held beliefs are not zoological phenomena but *constellations of meaning* that are constitutive of the process of cognition due to the fact that each conceptualization takes place through an act of self-representation. Adopting such an account of the logic at work when humans render their world meaningful, we ought to revisit the phenomenon itself and in its most extreme form: the fear of being eaten alive.

It is mid-August, 1810, near the village of Helden, about 40 km south of Nijmegen, the Netherlands, in a region where wolves are even now returning.[9] A nine-year old lad named Bartholomé Dahmen…

> …was helping his elder brother and sister with herding a cow and a goat about a hundred yards from their home. It was eleven in the morning, close to the woods – and the three children had little warning when a large wolf ran at them from the trees. Bartholomé was attacked and he was dragged off into the wood. When his father was alerted he ran, desperately following the tracks across the brook. There he found the remains of his son, still warm. Immediately the mayor rang the church bells, and people gathered and followed the wolf into the wilderness, armed with pitchforks (Kruuk 2002, 70).

This report by the Dutch zoologist Hans Kruuk of the wolf attack that killed Bartholomé can be read for insight into the relations, both historical and contemporary, between humans and wolves. And when I say I'm going to "read" the account, what I'm looking for is the ontological site of human engagement with wolves. I'm looking for evidence to support the contention that in its most radical form as a fear of predation the human representation of the wolf becomes a moment of pure self-representation. What, in short, might this classic recounting of a wolf-eating-a-human-being tell us about the meaning of the Wolf and about the ways that human beings make meanings?

Note, first of all that the story delivers the appropriate modicum of horror: "Bartholomé was attacked and he was dragged off into the wood. When his father was alerted he ran, desperately following the tracks across the brook."

Now this horror is not the horror attending the discovery of what Kruuk perfectly describes as the still warm body. This initial horror, rather, involves a certain distention and in fact a doubling or repetition of time. Think about the horror as the delay, the time of a still uncertain outcome and thus a certain desperate hope. Notice how the delay required simply to read the phrase captures and repeats in the mind of the reader the time it took for the boy's father to be alerted and then to run across the field, probably a common pasture, toward the woods. This narrative temporal delay is a delay in which the reader is required to participate simply as a condition of making sense of the narrative. But that means that the repetition of the temporal delay required simply to follow the story is affective: it generates affect. The term "affect" standing for the fact that in order to render the story meaningful it turns out that the story must be meaningful *to me*. Making sense of the story requires the re-presentation of time, and the representation of time requires a moment of self-representation. Simply to comprehend the story the reader must represent the delay.

[9] "In August, 2011 Desiree Versteeg, a Dutch motorist, was driving home in the suburbs of Arnhem in the eastern Netherlands when she saw an animal in the road. 'At first I thought it was a dog. Then I thought it was a fox. Then—I couldn't believe my eyes—I saw it was a wolf.' She got out of the car to take a picture. 'I was seven or eight meters away from him. He couldn't get away because a fence was blocking his path. He turned and stared at me. That was a frightening moment.' Both she and the wolf fled. From Ms Versteeg's photographs, and from the carcass of a deer found nearby—its throat torn out in classic wolf fashion—scientists verified that she was the first person to have seen a wolf in the Netherlands since 1897" *The Economist*, 22 December 2012 (*Anonymous* 2012). Also see Drenthen in this volume (Chap. 10).

The representation of a chronological sequence is, however, not itself a chronological sequence. The active narrative delay, the time it takes to read and actively to comprehend the intervening sentence, is a literal temporizing (he is dragged off, but not yet dead, perhaps, we hope). And the vicarious or narrative delay rests, or discloses a second, deeper, ontological delay. The representation of time, of narrative chronology, rests upon a formal condition—temporality—that is not itself a chronological moment, because it is, rather, the formal condition of the representation of chronological time.

And, to close the circle of contentions, temporality is simply another word for the act of self-re-presentation that is the basis of the generation of *all* meaning. And if my basic contention is correct, then the fact that this is not just any story, but a story about an act of predation, means that the story will explicitly expose this relationship between narrative time and temporality.

Return for just a moment to the distinction between the narrative delay that generates dread and hope and the ontological delay—the act of self-representation that formally accompanies the narrative delay and is its prior condition. I employ the term ontological in order to show that the moment of self-representation is not simply a feature of narrative comprehension but is the defining feature of discursive intellection, of thinking that has to make do with the re-presentation instead of the event. It is an ontological account because it traces meaning back to the particularities of being the odd sort of being we are. We humans experience the hopefulness of life only by holding in abeyance the dread certainty of the end. And we cherish that uncertainty, recognizing it as both a lie and as a space within which meaning is possible.

It is a lie because my *uncertainty* regarding the eventual place and time of my death can at best buffer but can never contest its absolute looming *certainty*. And it is the space within which meaning is possible because this difference between the uncertainty and the certainty—a difference about which I cannot remain indifferent—demands of me that I make some sense of it all. A meaningful life is possible—because meaning understood as a human enterprise is itself made possible—within the space opened up between the biological certainty (one will be dead) and the active representation of that certainty. It is difficult to imagine a more fundamental and all-embracing philosophical claim, even more so to imagine that it rests somehow upon our representation of the Wolf.

And yet the case of wolf loathing comes with a difference. Hatred of the Wolf does not involve merely a human ontological orientation toward death. Comprehending wolf-loathing pushes us beyond the identification of meaning with delay, thus beyond the common ground of horror and hope (we will certainly die, but not, we hope, today) and toward the ontological form itself of what we call experience. The form of experience is an act of self-re-presentation, the representation of our own being. And the paradigmatic limit case of such a self-representation is the active representation of my own annihilation. Or—to return now to my most radically contentious claim—the pure and original form of the act of self-re-presentation that accompanies all of my thinking is the horror that attends the active imaginative contemplation of being forced to endure and to experience one's own death.

The time sequence of the father's desperation merely screens us from, even as it thereby marks and documents, the other and inexpressible horror transpiring at the same time.

The heart of my claim is that wolf loathing is a public celebration meant to block or screen the celebrant from something else, something properly horrific, even unthinkable. When we say that something is screened, that it is stimulated and generated, but at the same time rendered absent, cut off, then we are employing the deep-hermeneutic notion of withdrawal (*retrait*). In the psychoanalytic tradition, a screen memory is a memory of an ugly event that is posited in order to protect the individual from the imaginative repetition of an unthinkably ugly event. The question of the Wolf is the question of the meaning of wolves posed in this way, that is, in a way that traces the process from repetition to re-presentation and then comes to grips with the critical phenomena of withdrawal. The event as traditionally understood—Mech and Boitani's "objective truth" about wolves—withdraws into its meaningful re-presentation (the Wolf). Allow me, by way of concluding, to make two efforts at justifying this reading of the Wolf. First a quick final return to the story of Bartholomé, and, second, a closer examination of some of the scientific literature on wolf-prey dynamics.

11.7 Abject Wolves

Return once more to the story of little Bartholomé. When I say that we have not yet recounted the meaning of the story that took place over a century ago, I'm saying that the real meaning of the story takes place in the withdrawal of its meaning, and that is because its truth is both virtually and also fundamentally unrepresentable. It is fundamentally unrepresentable because what is at work here is something like the pure form of self-representation itself: what makes representation possible is not something representable. And it is virtually unrepresentable due to the unexperiencable terror contained in the fact that in the same time it takes the father to be alerted and then to run—and thus in the narrative time through which the reader participates in constituting the surface of the story—in that same time the boy was being eaten alive.

The wildlife biologists tell us that whereas wolves generally kill small prey in the course of capturing and subduing them, with larger prey they attempt to provoke the prey to run and then, lunging in from the side or the rear and making a series of characteristic bites or tears to the soft tissues (in ungulates this is the perineum), they effectively bleed the victim to a point of such weakness that it can no longer resist. When the prey can no longer resist, and thus no longer poses any danger, the wolves shift their attention quickly and efficiently to eating. The point is that wolves do not bother to kill their prey but simply do what they must do to subdue it. Often that will result in the death of the prey, and often it will not. The work of the wolf (*Canis lupus*) is not to kill but to "bring down" the prey.[10]

[10] For a discussion of the variety of methods of attack see Peterson and Ciucci 2003; and Graves 2007.

In the case of this particular story, then, the narrative meaning that can be represented (we comprehend the story as a series of meaningful events) turns out to involve the virtual representation of what is not representable. And this is because making sense of this particular story turns out to require the narrative simulation of the formal conditions of meaning-making: the pure form of self-re-presentation being the unexperienceable limit of all experience, the idea of actually being present in or at one's own death. Not death as an instant of transition from being alive to being, in the next instant, dead but death as an event endured. The imaginative representation of such an event is likely to generate a certain anxiety. This ontological angst is not the representation of being no longer alive, and it is not even the thought of dying. It is, rather, an affect that accompanies the active re-presentation of my passive participation in my own death. It is an active moment because just like any other meaningful experience, such an experience would require a moment of active self-re-presentation.

So in this particular story something like pure objectivity itself—or if you prefer, the faculty of pure self-awareness—is somehow drawn out of its status as condition underlying representation (thus not itself representable) and it is drawn into the sphere of narrative representation. We are not "hard-wired" to fear predation, but the fear of being eaten alive does, formally, accompany all of our meaningful representations. If it appears to us at all, it does so in the form of what Heidegger referred to as an ambient angst, as an intimation of our own mortality, a looming awareness of death that accompanies all my representations but is not itself representable. It is a representation of an event that does not exist in time except in the most horrific of imaginable deaths.

In the story it is the sustaining ground of both the chronological time (the father's hopeful run across the filed) and of the affect that completes the meaning of the story (the reader's active representation of that chronological time). It is the unthinkable truth that it will probably take a long time for the boy to die, the human response to which is not, by the way, fear, but loathing. Here's that final re-reading.

In the time it takes to read those lines, in our minds, the mind of the informed reader, there will be represented a span of time during which Bartholomé was probably still alive as he was dragged into the wood to a spot of relative safety where the wolf could begin to devour him. It is too horrid even now, even at the distance of two hundred years, but to represent to ourselves the death of the boy we find ourselves representing as well the fact that as he is being eaten he is still alive. So what I'm talking about here is not Bartholome's horror but our own. The horror and discomfort I've just attempted to stimulate in you. It is *our* horror that is being screened, not his. The horror is neither a fear of being killed, nor a horror at the thought of having been eaten, though it is an element of the prospect of being reduced to the status of prey. It is in fact a moment of deep and hateful humiliation, the horror and the humiliation actively generated by the prospect of being present in—and having to actively constitute the experience of—that moment. Not, one last time, the moment of death but the duration of actually having to experience being eaten alive. This is not fear we are looking at. It is abject humiliation. And it generates a pure rage.

So we have arrived back at the point of my radical contention regarding wolf loathing. The pure form of self-representation itself is the active representation of having to be passively present at one's own death. It is an empirical question whether or not this active self-representation of a passive state of annihilation is the origin of discursive meaning.[11] But it is a *philosophical* observation to note that an act of self-representation constitutes the formal hermeneutic structure of meaning-making for discursive beings. Only such an account can accord the requisite status to imagination, assigning it a role at the root of each cognitive experience. Fortunately, hardly any of the objects we seek to know require a virtual representation of the pure form of self-re-presentation as a condition of their being cognized or experienced. And as a result not all of our experiences require the imagination of a fear that is immediately transformed into hatred. Not earthquakes or avalanches that could certainly kill us, not stairs or careless drivers, not lightening or falling tree limbs, each of which kill many more of us each year than do wolves. And though we may fear those natural events, even work hard to anticipate and prevent them, nobody would say that we hate them—as we do seem to hate wolves.

11.8 Fearsome Wolves

Since about 1999 a number of influential studies have examined the effects on an ecosystem of top predators, and many of those have been studies of Yellowstone wolves. The fact that wolves had been present, then exterminated by about 1920, and then reintroduced again in 1995 and 1996 made the Park an ideal setting for this type of field research.[12] The studies quickly moved beyond documenting the direct effects of wolf kills on the prey population and began to focus on the broader effects of wolf reintroduction on the ecosystem.

So, for example, studies have established that even vegetation communities prosper from the presence of wolves, not simply because wolves successfully

[11] This is of course not the setting to pursue these matters, but research surveys of primatologists by Hart and Sussman support the notion that prior to the arrival of speech, primate cries meant to warn of predators may have been the earliest instances of communal vocalization. Current studies show that primates are able to distinguish between different predation threats (eagles from the sky, snakes on the ground, cats in the vicinity) and then take appropriately differentiated forms of defensive measures in response to that learned set of cries. What this means is that in any primate situation many more members of the group will be required to hear a warning cry and then "imagine" the threat than will actually see or sense the predator (Hart and Sussman 2009, 185).

[12] "We also synthesized studies on trophic cascades published during the first 15 years after wolf reintroduction. Synthesis results generally indicate that the reintroduction of wolves restored a trophic cascade with woody browse species growing taller and canopy cover increasing in some, but not all places. After wolf reintroduction, elk populations decreased, but both beaver (*Caster canadensis*) and bison (*Bison bison*) numbers increased, possibly due to the increase in available woody plants and herbaceous forage resulting from less competition with elk" (Ripple and Beschta 2012). Recent efforts by Arthur Middleton to chip away at this model have produced more heat than light.

reduce the size of prey herds but because the presence of the wolves alters the behavior of the far greater numbers of the prey herd that they don't kill. Often referred to now with the phrase the "ecology of fear" or sometimes the "landscape of fear", these studies have confirmed that top predators can have measurably positive system-wide effects, called cascading effects because they begin with the top predator and expand down the food chain (Berger et al. 2001; Laundre et al. 2001; Ripple and Beschta 2004; Beschta and Ripple 2013). The term "landscape of fear" (a notably piquant and dramatic phrase in the laconic world of wildlife biologists) refers to that range of responses, the changes of behavior that can be attributed to the non-lethal effects of the presence of predators, specifically wolves.

The "landscape of fear" studies overlap with what is called "optimal foraging theory" to generate a picture of wolves constantly testing, probing, harassing and therefore pushing and moving the ungulates that are their primary prey populations, and altering thereby their grazing habits. Elk, for instance, will be less likely to occupy open meadows (their preferred pasture) but seek instead the safety of the tree line (a lower quality pasture). And elk that have been subject to predation threats from wolves will raise their heads more often, devoting measurably more time to remaining alert and less time to grazing. So while the overall picture, nearly twenty years after wolf-reintroduction in the Yellowstone region is one of beneficial culling of the prey populations and of direct and indirect benefits to other species it is important to remember that these benefits are consistent with overall reductions in the size of the elk herd (Berger et al. 2008; Ripple and Beschta 2006). For our purposes, philosophical and political in the broadest sense, this is the first critical juncture, namely the point at which studies that document the reduction of the size of the elk herd intersect with studies that postulate broader non-lethal effects due to the inculcation of fear. Are the behaviors that have been observed in the prey population attributable to fear? And if so, then is that fear communicated not only down the trophic cascade, but also upstream to the human beings who in their capacity as hunting guides or ranchers now have reason to fear the wolf? Do these studies suggest that wolf loathing is a behavioral adaptation to the fear of wolf predation?

Recently a few studies have picked up on these non-lethal effects and have expanded the story by jumping from wild prey to livestock. These livestock studies generally begin by citing the "landscape of fear" research but then focus on a distinct account of the mechanism involved. They focus on the harmful effects of stress in the prey population, in this case usually cattle.[13] And they focus on non-lethal stress effects because the livestock studies do not need to begin by attempting to document depredations (successful kills) since these are evident in a controlled livestock situation. Whereas the wildlife studies are able to document both direct benefits to the prey population (elk herds that are both smaller but also healthier) and to the ecosystem as a whole (ranges no longer overgrazed by elk), neither benefit is discernable in the livestock environment. With regard to domesticated livestock it is

[13] Anti-predator behaviors, if present, might result in increased stress, which might make cattle more vulnerable to infections and diseases, abortion and early birth, and weight loss of adults (Laporte et al. 2010).

impossible to discern any benefits from the return of wolves to regions of the U.S. where they had been exterminated.

Like elk, cattle and sheep that graze on ranges visited by wolves will devote more energy to remaining alert and less time to grazing. And like elk, the cattle will thus put on less weight than they otherwise would. Here we arrive at the second juncture in any attempt to read these studies for insights into hyperbolic wolf loathing. The first juncture was the intersection between studies confirming non-lethal effects of wolves on the elk herd with studies confirming ecosystem benefits resulting from this posited landscape of fear: behavioral adaptations by elk that fear predation. This second juncture involves the double transposition of those initial wildlife studies: the transposition of fear in wild herds to stress-effects in domestic animals, and the analytic transposition from an ecosystem environment to a political-economic environment. To test the legitimacy of this web of transpositions we need, first, to briefly examine some of the details of the livestock studies, then we need to test the matter itself. Do wolves produce non-lethal effects in prey populations through the inculcation of fear and stress in the prey-species, and is this fear and stress then communicated to human populations where it becomes the cause of hyperbolic wolf loathing?

11.9 Stressful Wolves

There is an interesting parallel between studies of the two prey populations. In both cases, wild and domestic, it is the non-lethal effects that are of greatest interest. As was true when we briefly looked at the facts concerning the threat of wolf predation on humans, so too here in the case of livestock: North American wolves almost never eat humans, and they don't really eat very many cattle.[14] Furthermore because across the United States, stockgrowers will be reimbursed for direct losses when cattle are killed by wolves, direct depredation is not a rational basis for hyperbolic wolf loathing. As the studies cited by Mech and Boitani demonstrate, wolf loathing is nearly universal amongst stockgrowers, but not because wolves eat a lot of their stock.

Instead, the studies of non-lethal effects of wolf predation on livestock focus on predation stress.

> …it is plausible that other impacts predators may have on livestock production include abortions from the stress of being harassed by predators, disease transmission, decreased weight gain from increased vigilance by livestock living near predators, potential reduction in meat quality from stress… (Lehmkuhler et al. 2007)

[14] Annual reports by the Montana Fish and Wildlife Service's Montana Wolf Program (www.fwp.mt.gov/wildthings/wolf) show that wolves kill fewer than 100 of the 2.5 million cattle in Montana each year and while sheep and lamb depredations are higher (300 losses to wolves in 2012) coyote killed thousands of sheep or lambs that same year. When asked directly why, given these numbers, operators in the Yellowstone region devote so much energy to campaigning against wolves but never even discuss coyote, one rancher who was both an elected and a recognized leader in the wolf-wars told one of my student-researchers simply: "Coyote,…he's my mouser."

And the reason behind this focus on stress effects is obvious. Studies of livestock often mimic the language of the wildlife studies but implicit in the livestock studies is the truth that the animals in question are being analyzed not as elements of an ecosystem but as units in an economic production process. If wolf predation produces smaller but also perhaps leaner and healthier elk herds, the same cannot be said for domestic cattle or sheep.

One view is that unlike wild elk, cattle and sheep are unable to respond effectively to predation threats. Domesticated cattle, for example, have not been bred to be lean, healthy, responsive animals. They are simply less able than wild elk to respond to the predation threat of wolves due to their "anti-predator" responses being "attenuated due to domestication and artificial selection by humans" (Laporte et al. 2010, 2). So while the non-lethal effects of wolves on elk may be generally beneficial to the overall health of the elk herd and are clearly beneficial to the ecological environment, the same cannot be said for cattle and their political-economic environment.

It is not all that surprising, then, that the passage cited just above from a study of Wisconsin farms measuring the stress effects, the non-lethal effects, of wolves on cattle, continues:

> …it is plausible that other impacts predators may have on livestock production include… emotional stress placed on livestock producers concerned about depredations…Research on risk perception suggests that people focus on maximal events, not average losses, and this helps explain why so many livestock producers are anxious (Lehmkuhler et al. 2007, 2).

And here, from a separate study:

> Anti-predator behaviors, if present, might result in increased stress, which might make cattle more vulnerable to infections and diseases, abortion and early birth, and weight loss of adults…The risk effects of wolves on livestock might therefore ultimately influence human tolerance for wolves in livestock production areas (Laporte et al. 2010, 1).

In other words human beings can be drawn into the landscape of fear hypothesis by showing that through their non-lethal effects wolves stress the cattle, which stress is then communicated to the cattle's owner. It is important to notice, however, that the medium of the stress-transfer is not the zoological critter (the cow) but is the economic environment that defines the "health" of the cow. The difference at issue here is not really the difference between elk and cattle. In the first place the predator-response differences between wild and domestic animals is itself a direct consequence of the not terribly subtle difference between the meaning contexts in which the animals live and die. Cattle are only incidentally animals, they are primarily units of economic wealth. They are capital investments and as such their "health" is merely a euphemism for their weight. Most of the cattle in the U.S. are raised on what are called cow-calf operations (McBride and Mathews Jr 2011). The operation will own and maintain enough heifers (younger females) to maintain a breeding operation for calves, but the calves themselves are sold to feedlots, (most as soon as they are weaned, at under a year) where they are brought quickly to a maximum weight under the most deplorable and unhealthy conditions.

To speak in such a context of the "health" of the animal would be absurd except for the fact that the stress in question here—the non-lethal effects of wolves on

livestock—is imposed not on the animals but on what livestock producers call their "operation." It is doubtless true that cows and calves that forage on pastures in the vicinity of wolves may show a decrease in expected weight gain, but it is another matter entirely to assess the health of these animals.

The non-lethal effects of wolf predation on livestock (as opposed to wildlife) are stresses imposed not on the animals per se, but upon livestock producers, by way of the political economic medium that is the market. But even granting that transformation with its critical shift from ecosystem health to economic system harms, what of the underlying claim itself? The livestock studies do seem to document the difference between ecosystem and economic system as they articulate the transfer of fear and stress from the animal to the human livestock operation, but they also directly reference the wild-prey studies in order to affirm the fundamental premise that through their predation-threat wolves produce a landscape of fear.

From the perspective of our question one of the most remarkable of the studies in this area was published in 2009 under the somewhat daunting title "Glucocorticoid stress hormones and the effect of predation risk on elk reproduction" (Creel et al. 2009). The researchers introduced their work by citing, first, the consensus that non-lethal risk effects are more significant than actual depredations in measuring the impact of wolves on their prey. They then set out the two standard hypotheses to explain those non-lethal effects: the predator-sensitive food hypothesis (alert to the risk of wolves, elk adopt behaviors that reduce their grazing efficiency) and the predation stress hypothesis:

> The predation stress hypothesis suggests that exposure to predators causes elevation of glucocorticoid (GC) stress hormones…which can directly suppress reproduction…and can indirectly reduce survival and reproduction (ibid., 12388).

So this study seems to promise an experimental confirmation of the general notion that wolves impose upon prey-animals a generalized and heightened state of stress, a landscape of fear, which fear is then communicated from the prey-animals to the humans who raise or harvest them. In fact however that is precisely the story that this study manages to disconfirm.

The researchers were able to rely on prior studies to establish two critical facts. First, they knew that "exposure to predators or their odors can cause immediate, short-term increases in the circulating GC levels" (ibid.). Second, however, they knew that whereas chronic elevations of GC levels "can interfere with hypothalamic-pituitary-gonadal functions, brief pulses of GC secretion normally do not" (ibid.). In other words, the harms associated with stress accrue to the elk only if that stress is chronic—but not if it is periodic. Stress effects are harmful only if they constitute a true landscape of fear.

By sampling for GC stress hormones in elk fecal matter the researchers came to the conclusion that there was, in their samples from four elk populations over four winters, no positive correlation between GC stress hormones and wolf predation pressures. In other words (mine not theirs), while the elk do respond to an actual wolf-predation threat with heightened stress, the stress does not produce a state of fear. Elk do alter their grazing behaviors when they share a range with wolves,

but they do not live in a state of constant stress. In a word, they do *not* fear the wolves. The fundamental point here is that prey-animals don't have to fear the wolves in order to be alert to the wolves when they are present and to respond. Furthermore, they are clearly capable of adopting long-term shifts in grazing behavior to accommodate the possible presence of wolves, but again without needing to live in a state of fear. Their alertness is real, but it requires no postulated state of stress over time, in short, no fear.

On the other hand, human beings who view the elk not as animals per se, but as units of economic investment (such as the outfitters in our photo) would seem to suffer the same stress effects as those suggested in the studies of livestock owners. Except that now, in the light of the finding that elk do not in fact "fear" wolves, this communication of fear from prey-species to humans becomes all the more remarkable. The actual prey-animals do not fear wolf predation, but those humans who prey upon those prey-animals do fear becoming the prey of wolves. The stresses that produce wolf loathing, then, are not communicated to the stockgrowers by way of their stock but by way of the meaning-context that defines them. Strictly speaking there is no landscape of fear.

Fear has, of course, always been an ambiguous term in relation to wildlife. The term is legitimately used to characterize a landscape—a set of adaptive responses along with the direct consequences of those adaptations—rather than as a rigorous characterization of the state of mind of the prey animal. And since in the case of animal studies it is the observable behavior—rather than some posited state of mind—that is important, the ambiguity is acceptable and even useful. We strictly measure stress, and we roughly postulate fear in animals.

What happens when that ambiguity is allowed to go unquestioned, however, becomes clear when the shift from wild prey to livestock generates a corresponding shift from the non-discursive critters to humans. Several of these studies seem to suggest that a landscape of fear hypothesis can be transferred over from the studies of wild prey to studies of domestic livestock. But when that transfer takes place it also permits an unexamined and unacknowledged transfer of the stress-fear equation from the wild landscape to the economic-production landscape.

This slippage is, I suggest, precisely the same slippage that we were observing in the earlier studies that attempted to account for the significance of human "beliefs" in relation to objective facts about wolves. But when the ambiguity inherent in the equation of stress with fear is transferred from studies of wild landscapes to studies of domestic-economic production processes something that was invisible in the earlier studies becomes suddenly evident. And it becomes evident not as a result of philosophical speculation about the formal nature of human cognition, but as a result of an effort to document the precise nature of the stress imposed by predators on potential prey. What becomes evident is that stress is not fear but that fear is the re-presentation of stress. Fear is not a biophobic response to stress but is discursive construct characteristic of animals who must represent their experiences as such simply in order to experience them. Fear, in short, is an hypostasized mental state, a reconstructed "cause" of hatred.

In the twenty-first century American West, wolf loathing is a hyperbolic trope, a free-floating signifier, and what it signs or indicates is the quite sophisticated awareness on the part of many traditional westerners that the wolf represents their own extirpation. Where predators are protected it is not the threat to life that excites this characteristic loathing. It is the threat to a way of life. The ability to shoot predators on sight is the key to maintaining control over public lands. But if philosophers have anything to contribute to this battle over the preservation of public lands in the American West it is not at the level of policy analysis. Wolves are despised by a certain category of Westerner for exactly, I say exactly, the same reasons and in exactly the same way as was the American Indian. What we humans fear is not our own death, but what our imagination provides to us in the place of the unrepresentable withdrawal of that singular certainty. What we fear is what we hate and what we hate is the idea of experiencing our own extermination, the torture of being annihilated and being aware of that annihilation. The hatred of wolves is in fact an abject loathing, an indication of the inexpressible realization that the extractive industries of the West cannot survive, cannot be sustained, but are in fact consuming the very resources upon which they rely. And every policy that would temper the drive to extraction, every attempt at conservation, is resisted not because it is a threat (the loathing is inversely related to the threat), but because it stimulates this unthinkable realization that—like the all-knowing but unknowing Zeus in the story of Lycaon—the extractive industries of the American West are in fact eating themselves alive.

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Chapter 12
Blurring Boundaries: Freedom, Enclosure, and Death

Brian Seitz

12.1 Accidents

According to the canonic account of its origin, western philosophy was put into motion by the problem of the one and the many, or philosophy put the problem into motion. This intrinsically wild problem was rapidly domesticated and conceptually corralled by philosophy's emergent preoccupation with substance and accident, a matter of distinguishing between what counts (substance) and what does not count (accident), between what has noteworthy or stable existence and what was imagined to be a fleeting distraction, the ontological aspect of accident reduced to little more than an obscuration of substance, of, that is, essence.

Historically, the accident was thus deprived of force and its significance diminished by the dominant tradition. Now, however, and signaling the accident's indifference to philosophy, we find ourselves struggling with all of the accidents that modernity has created, scattered across the planet, and left literally in the dirt (and water and air). A byproduct of unintended consequences, the accidents ascend in their accrual, continuing to pile up (in solid waste sites) and to shift around, including in the bewildering and often perplexing form of the invasions of "exotic" fauna, e.g. pythons nesting in the Everglades before slithering through saltwater to the Florida Keys, Asian carp breaching Lake Michigan, lice leaping from farmed salmon to wild, etc. While, in our post-Nietzschean world, philosophy has come to suspect that substance devolves into accidents or that the hierarchized distinction is a fishy one, it is only just recently that the accident seems to have eclipsed and in a certain sense displaced substance. In fact, and with global warming as the ominous backdrop, it is probable that the planet is headed for a *general accident* (not, perhaps, an abrupt cataclysm but a protracted process of collapsing systems) (Virilio 1997).

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If, historically, the accident was granted secondary status by philosophy, the general accident cannot, by definition, be contained. And with the prospect of the general accident, we witness the return and convergence of the one and the many, in a highly problematic form. Unencumbered by philosophy, the other animals already know and are scrambling from this. Propelled as if beyond choice into a New World, the human animal struggles to understand what happened to the priority of substance.

12.2 Animals

The variegated fluidity of inter-species relations renders futile any philosophical desire to *capture* the dynamic of those relations or to push toward a conclusion. We are obliged to make observations that will resonate with political possibilities, yes, but we are also aware of the awkward limitations and compromises of the tools proffered by both philosophy and scientific wildlife management, the best we've got, we barely manage.

Leaving substance behind and working toward an understanding of the general accident, what I'm going to take up here is the mobilized distinctions between urban and rural and to a certain extent Old World and New World as these distinctions pertain to our non-human cousins and to our relations with them. It is my hope that the series of reference points that unfolds here will add up to something like a phenomenology or an exercise in eidetic variation, and thus to philosophy by implication. The simplest way to open might be to invoke a vague phrase such as "the evolving complications of wildlife habitat," and then to try to get clear about the status of this phrase. But I'm interested here less in the question, what is "wildlife habitat" now?, and more in the question, how does wildlife negotiate its existential situation?, a situation that is in obvious ways increasingly less hospitable, even while hospitality and habitat are determined by the entire concatenation of creatures in relation to each other, wherever and however they are able to make themselves at home, determined too and often compromised by human creatures hallucinating themselves as "lords of the earth" (Heidegger 1977), usually with the best of intentions.

Hallucinations or not, the fact is that all of the other creatures have to adapt to us and to the consequences of our ways of living in whatever form is possible to a given species, and there is something as extreme about many of these adaptations as there is about the conditions we make available to or impose upon them. While black bear not to mention brown bear attacks on humans are significantly up in recent years in North America—both species are simply being crowded—and while coyote cleverly disguises himself as a dog in order to go on hunting forays in cities, the rodents continue to enjoy sharing food with us everywhere, which is why, for example, the government of Bihar, in India, has for the last several years officially encouraged its citizens to save grain by eating rats.

Barnett Newman once said, "Aesthetics is to art as ornithology is to birds."[1] In this case, the birds, rats, bears, and other non-human beasties might be indifferent to what philosophy has to say about our relations with them (well, humanity is largely indifferent to philosophy, too). For the most part, the other animals care where we stand only when we stand in their way, in which case they tend either to ignore us, to flee, to consider thieving from us, or simply to loiter, hoping for some easy treats. While we humans often thoughtlessly establish relatively arbitrary, accidental, or utterly imaginary boundaries between ourselves and the rest of the creatures, those other creatures tend to interpret, cross, or mark our boundaries in their own manner, or to bump into them in often violent ways, violence which takes endless forms, or maybe, finally, just two basic forms, the death of individuals and the threat of death to communities and species. On the other hand, some prominent boundaries are truly protective, while others are really less about the human relation to non-humans than they are simply about human pathologies. Some boundaries free, some confine, some are so literal as to be counter-productive, some echoes of actual bio-regions, which themselves are both definite yet fluid. Enthusiastic officials in Arizona crossed a tragic boundary when they trapped a ranging jaguar last year, one who probably slipped across the U.S./Mexico border; the jaguar died shortly after its release into the wild, a solitary nomad inadvertently retired (since then, other jaguars have been sighted in Arizona, as have ocelots). Whether they are constructs on a map, fences, or laws, boundaries are vital and sometimes lethal acts of the imagination. We draw lines of different kinds, and the animals do their best to ignore or negotiate them. Wranglers haze bison back into Yellowstone National Park in springtime, but many of the creatures promptly return to where they'd previously been enjoying themselves.

Boundaries are continually shifting and being tested, and the animals ensure that *their* relations to boundaries are endlessly mutating in ways that cross all fences, mutating in order to be free. There are few things more remarkable than watching a pronghorn antelope scramble under a barbed wire fence, an awkward bit of choreography rehearsed quite a bit in the last mere hundred years or so, the animals forced, as they often are, to learn a new dance of freedom in just a whisper of time, a dance that in the case of antelope does not always end well. This particular example would seem to have nothing to do with the urban/rural distinction were it not the case that the barbed wire is part of the history and system of meat production. Fences are a material symbol of "civilization," which is to say that they are synonymous with civilization, every wire fence a reference to the city, every city's dependencies a reference to the rural. Those antelope are as wild and quick as the wind, but they are running up against the city every time they encounter wire. Wire fences stretch from their posts back to the truck and train that transported them from the factory and the foundry, which in turn stretches back to the mine, to geology and the accidents of geological time.

[1] Newman was recorded saying this in August of 1952, at the Woodstock Art Conference in Woodstock, NY, in discussion with the philosopher Susanne Langer.

I'd like to make the question of the urban/rural distinction more specific by turning to some extraordinarily contrasting references. These references might be linked to the distinction between Old World and New World, although not if that distinction is literally mapped onto the globe, and only if differing configurations of bioregionality are addressed in terms of history and evolving culture/nature (including nonhuman animal culture/nature), in other words only if bioregionality is taken up in terms of temporality as much as geography, political/cultural time fused with mutating space.

Old World, twentieth century: Following reunification, teams of field biologists from the west poured into former East Germany, eager to assess the lay of the land after a half century of relative isolation. One thing they anticipated in advance; with the foreknowledge that environmental issues were never even an after-thought for Soviet-style production managers—a problematic fact for the model of consciousness offered by dialectical materialism—these scientists expected to encounter a topos of toxicity. Once in the field, however, they were profoundly and in some ways happily surprised. Indeed, it was true that industrial zones were extremely polluted and degraded. However, fueled by a modernist zeal for the value of an efficiency unachievable by the arbitrary vagaries associated with corporate capitalism and the "free" market, communist management had concentrated production and thus population in urban centers, and the countryside was left only very lightly populated. Thus what these scientists discovered was that rural eastern Germany was wilder than and contained notably greater biodiversity than western Germany. Through the vicissitudes of political history, then, this region of Europe had, for a few decades, established a relatively clear division between the urban and the rural, a division that benefited the creatures and other growing things. That division was an artifice—an accidental social construct—but from the standpoint of wildlife, the effects were real if not also fleeting; the nonhuman animals were a beneficiary of communism because they were apparently not an element of communist consciousness at all, which would seem to indicate, in turn, that if consciousness is a reflection of the material conditions of production, those conditions must have been relatively barren, characterized by a sort of speciesist solipsism.

Old World/ancient world: When I was a child, my grandparents lived in Hoonah, Alaska, a small fishing village on Chichagof Island. When we would visit Hoonah, my little brother and I were free to roam around, and he and I would spend most of the time fishing off the pier or playing with the kids who lived there. Once we were treated to a trip on a commercial salmon boat with a crew of Tlingit fishermen, who had the good humor to pretend that we were helping them as they plied their nets, harvesting salmon, most of which wound up canned for urban supermarkets. For little boys, we had lots of freedom to roam, but our grandmother was adamant about one thing, which was that we were forbidden from wandering into the forest outside the village because of the brown bears, of which at the time there were plenty. Decades later, I read an article about ecotourism in Alaska (Crittenden 1997). Focused on the splendors of nearby Admiralty Island, the article noted as an aside that there aren't many bears on Chichagof anymore because so much of the island has been clearcut (means few deer means few bear). I got sick to my stomach when

I read this, timber mining the insidious incursion of the urban into the rural via the market, in this case the market for trees perceived and managed as timber turned into lumber for building what the construction industry calls new "homes", the direct cost of so-called growth in timber frame homes being the disappearance of what was once home to a very healthy population of bears. By now this is a familiar story, a perverse convolution of the relationship between urban and rural. As is in some senses the case with the war over wolves, it wasn't the brown bears who were targeted, just the standing reserve in which they had the misfortune to live. I'm sure that Hoonah is much safer now, just not for the bears (and probably not for the fishermen, either, given diminishing salmon stocks).

New World, twenty-first century: First topic, some references to the deliberate restoration, reintroduction, and herding of indigenous species, which is an uneven story. For starters, alarmed by what they see as the networked locations of the ultra-wealthy Ted Turner's ranches—which are scattered across western American states from Canada to Mexico—conspiracy theorists believe that Turner is surreptitiously attempting to resurrect the ancient bison herds under cover of commercial livestock endeavors, trying to make it all go wild just when we got it under control. While it would be nice if that ambition were true, what is true is that "domestic" bison herds in the United States are doing quite well thanks to an emerging, nationwide market for bison meat. In terms of sheer numbers and basic survival, that's probably a good thing. But what about the small herd that has been sequestered in Golden Gate Park in San Francisco since 1891, elegant beasts essentially transformed into a mortuarial monument to the days that now exist only in the imagination of the Ted Turner conspiracy theorists and—more poignantly—in the ghosts of tribal memories. There was so much snow in Montana one recent winter that a herd maintained by the Assiniboine at Fort Peck simply walked right over the barbed wire fence, a mobilized counterpoint to anything mortuarial, as well as to enclosures.

In outline, Adirondack State Park is larger than Yellowstone and Glacier National Parks combined, would thus seem to be an obvious candidate for the reintroduction of wolves, and there are biologists in the employ of New York who have long been eager to do so. And yet if you look at a map of the Park, you'll see that despite containing large regions that are relatively remote, it is also thoroughly peppered with private property, which means that "real" estate ensures that wolves will never be welcome there again. The New York State Department of Environmental Conservation is not very forthcoming about the success of its lynx restoration program, and is even less candid about the presence of cougars, which it has never attempted to reintroduce. When I reported seeing a mountain lion in the Catskills—less than three hours from New York City—a field officer admitted to me that she had seen one, too, but in the same breath said she wasn't authorized to acknowledge their presence, adding the somewhat hopeful observation that she figured the official silence was intended to help protect them, existence predicated on the denial of existence, at least conceptually not the most vibrant strategy (even if there is something to be said for silence). Then, more recently, a cougar was killed by a car in Connecticut, and even then the State's reluctant proclamation was that this doesn't prove anything about the existence of *eastern* cougars, in this case obfuscation

apparently trumping silence. Until a DNA analysis indicated that the cat had apparently walked all the way from the Black Hills of South Dakota.

In Europe, the New World (i.e. the modern world) is resurrecting aspects of the Old World (i.e. the pre-modern world) through some very ambitious restoration programs. Beavers reintroduced into Scotland after a full 400 year lull reproduced their first offspring in the wild not long ago. Confounding the rural/urban distinction, otters have reinhabited the River Leith, which flows through Edinburgh. On the other hand, and in order to avoid putting an overly positive spin on developments, the Scottish wildcat population is perilously low, and invading grey squirrels from America have indigenous red squirrels on the run throughout Britain, but I digress, so let us cross the Channel.

Protected by the boundaries of hunting forests owned by Polish kings and then, later, Russian czars, the last surviving herd of indigenous European bison lives in Bialowieska National Park in Poland. In 1860, as part of his bison preservation program, Czar Alexander II—renowned also for having emancipated the serfs—ordered all bears, wolves, and lynxes in that forest to be shot, and the herd flourished despite the decline in predator populations. Later, by the end of WWI—during which time soldiers had a field day killing animals for meat—literally all of the native bison were gone from the forest, and the only wild few of the species lived in the Caucasus; the last of those survivors were exterminated—assassinated?—in 1927. Fortunately, a few dozen remained scattered in zoos, which enabled Poland to restock. Currently enclosed in a wire fence—its freedom premised on confinement, something like the opposite of what wire represents for American pronghorns—the Polish herd is now 800 strong, robust enough that a small sub-herd of that population has recently been reintroduced to Spain and other European countries. The birth of this herd's first calf seems a glorious yet somewhat dissonant event given the culture of bullfighting, but it is also deeply resonant with ancient pictographs of these very same creatures.

Spain and the EU are also investing literally millions of Euros into the preservation and further reintroduction of the most endangered wild feline in the world, the Iberian lynx. This effort hinges primarily on persuading landowners not to shoot or snare these cats, which are smaller than an American bobcat. The preservation challenge from now on is thus a battle of the imagination, a battle, that is, against the ancient perception of predatory creatures as trespassers and transgressors, as, that is, vermin. There are now about 300 of these little cats, and their status has gone from "critically endangered" to merely "endangered". Neither Spain nor the EU will be reopening a hunting season on them any time soon.

New World, twenty-first century, second topic, reference not to human driven restoration projects but to some instances regarding which the line between urban/rural has gone, well, quite wild in other ways, as "wildlife" is moving of its own accord back into cities, as, that is, certain sorts of fences seem to dissolve.

The current hunting scene in Berlin provides a marked contrast with Spain's lynx terrain. Inside the city of Berlin, wild boar populations have reached possibly 10,000. These tusked creatures, which reach 300 pounds and are infamous for their aggression, leave a path of destruction in their daily rootings and foragings, and are purportedly responsible for as much as 15 % of the city's automobile accidents.

In a controversial move, the city has contracted for professional hunters to cull the herds, even providing a special, extra price for piglets (whose mothers are training them where to find the best feed with the least effort). This policy has had serious problems. For one thing, there is significant opposition to the hunting from a range of constituencies, including the significant portion of Berlin's population that likes the boars and believes that the people and the pigs should simply share the space of the city. And then there are basic safety issues, represented by the boar who, having been wounded by a hunter, recently bit three humans in a city park (not to mention the obvious danger of stray bullets flying through the urban air) (Arms 2011).

Returning back across the Channel, the formal fox hunt is an iconic symbol of rural Britain, an animated display of the rituals of social class fused with blood sport, yet another diversion or pleasure pitted against varmints. One might consider the fox hunt emblematic of some imagined Old World. However, historically it is really not, since the English fox hunt dates only to the late seventeenth century—i.e. well after the "the New World" had become a semi-extension of Europe, thus promptly problematizing any secure or discrete meaning attached to "the Old World"—the hunt's origin congruent with if not also causally linked to the decline of deer populations (which is part of a much larger story related to systematic habitat destruction). But foxhunting accelerated in the nineteenth century, when, on the one hand, Victorians were enamored of British "traditions", while, on the other hand, game laws were relaxed, railways provided urban dwellers with easy access to the countryside, and the refinement of the shotgun led to an increased popularity of upland hunting. As a consequence of the latter—the popularity of birdhunting in particular—gamekeepers were quite happy to kill as many foxes as possible in order to enhance the populations of pheasants, grouse, rabbits, and hares, and so foxhunting flourished.

The gaudy drama of the hunt—the formal, self-serious semiotics of the garb and gear, the horses, the horns, the chase—may deflect some attention from the central, poignant, and somewhat perverse fact that what the hunt is about, largely, is canine set after canine, packs of hounds against individual foxes, domestics against the wild, yet another instance of the state machine dedicated to the destruction (but, in the name of sport, not extermination) of the nomad. Proponents continue to yammer on that it is an important countryside tradition, even though fox hunting is now illegal in England, Wales, and Scotland. Why bring it up here? Because it is a rich counterpoint to the fact that foxes have overrun the City of London; anyone who spends much time in that city is probably familiar with the experience of being awakened in the middle of the night by the sounds of them yowling as they copulate. Not long ago, a friend saw one walking down the middle of the street at night with a rat between its teeth. I myself have seen them sunning themselves unconcerned on a hidden lawn in the middle of the afternoon, and someone I know saw one prancing in the daytime on a rooftop in the Southbank Centre—literally the top of civilization—just down from the Tate Modern and a few yards from the Thames. It is estimated that at least 10,000 wild red foxes live in London proper (oddly, roughly the same as the wild boar population of Berlin), and while they do tend to scatter garbage and to defecate in awkward places, the fact of the matter is that most Londoners seem

not to mind their presence that much, given the foxes' appetite for rodents, i.e. given their appetite for vermin. Well, at least they didn't mind until 2010, which featured several incidents of fox drama, the most newsworthy one involving the fox who slipped into an East London apartment and chewed on two nine-month old human babies. The babies survived, and a fox was subsequently caught and "humanely" killed, although there was no evidence that that particular fox was the culprit, its death thus purely symbolic, the embodiment of the clumsiest form of justice. It is, however, conceivable that that symbolic death explains why London's foxes have committed no major transgressions since perhaps they have been, in a Foucaultian sense, "normalized". And if the execution of one symbolic creature helps forestall efforts at mass extermination, perhaps it's just as well.

Meanwhile, foxhunting advocates continue to try to repeal the ban, an initiative that might be linked to Tory calls to withdraw from the European Union in the name of maintaining a distinct sense of Englishness (such calls do not really seem to be about Great Britain). But for the time being, and despite unsystematic efforts to cull them, this *urban* fox population is free and more or less safe.[2]

12.3 Haywire

And yet beyond the increasingly unstable distinction between urban and rural, and on all sides of every modern fence—every one of which is essentially interconnected on a global level, thus together comprising a system of enclosures (an embodiment of the persistently problematic relation between the one and the many)—no creatures seem safe in the bigger picture, which leads us back to the premonition of the general accident. This ominous prospect certainly refers us to Chernobyl and Fukushima but is not restricted to literal nuclear accidents since it also includes the accelerated melting of icecaps and glaciers, extreme weather fluctuations, and the aggregate of diminishing biodiversity—a fundamentally necrotic process—including both the outright loss of species and the compromise or dilution of biological phenomena through the intersection or crossbreeding of indigenous species and technologically engineered ones, exercise in "control" accompanied by multiple losses (including, most significantly, the loss of control), all this associated with and signaled by the dislocation of animals, of creatures carried or forced out of place. In India, the demolition of forests has accelerated the dissolution of the line between rural and urban, the consequences of which have led to leopards straying into cities and attacking people, as happened recently in Guwahati, an Indian city with a population of nearly a million. There will be no reforestation for those leopards and all of the creatures that have been lost are gone forever; things are not and will not be set right. In Viet Nam, there are so few elephants in the wild that conservationists have already given up on saving them.

[2] Mammal Group University of Bristol, "Urban Foxes," The Fox Website, http://www.thefoxwebsite.org/urbanfoxes/index.html (accessed August 31, 2012).

So the notion of the general accident, on the one hand does not refer to an event, and, on the other hand, challenges philosophy's historical dismissal of the accident. Pushing further, the general accident might be thought of as ontological, certainly not just worthy but demanding of serious philosophical consideration. In a way regarding which Aristotle could not possibly have foreseen the philosophical consequences, with the invention of the automobile comes the invention of the automobile wreck, an observation that effectively makes the accident the double of substance, a tangible, twisted ghost, essence haunted by its other (essence).

The general accident is not one problem but the interconnection of many, the net effect of "globalization"—technologization—not a catastrophe but overall an absolute disaster as temporality dissolves into the instantaneity undergirded and made necessary by the machines. General accident: Everything starts going haywire.

New World, final reference, haywire: Those stranded polar bears we keep hearing about would seem to be light years from any urban concentrations, but it is precisely "the city" that is simultaneously drowning them and forcing them to go high and dry, i.e. that is forcing everything *to go south*, as we Americans sometimes colloquially say. Unlike Berlin's boars and London's foxes and Nairobi's lions—all of which have invaded the city—the city has invaded the polar bears. From an anthropocentric or superficial perspective, the boars and foxes are an oddity insofar as they have transformed a cityscape into wild habitat. From a broader, more objective perspective, though, the city has infiltrated the entire planet, and the only habitat left for those polar bears—inextricably wedded to us—will soon be the zoo. This is not a metaphor but a fact, something like the opposite of hyperbole. We must of course take heart in negotiated freedoms and in recent, often contested successes; American wolves, Scottish beavers, Polish bison, Iberian lynx, and then, working in a different direction, Berlin boars and London foxes. Habitat shifts, but while those shifts invariably entail struggle, the shifting is not an eternal process. We know that the destiny of those bears is the essence of the modern world, which is to say that, from a Heideggerian standpoint, it hints at a form of unconcealedness—of revelation—not endtimes, just slow, accidental death.

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Chapter 13
The Hero, the Wolf, and the Hybrid: Overcoming the Overcoming of Uncultured Landscapes

Nathan Kowalsky

13.1 Introduction

In the past few years, my children have grown to love listening to the orchestral tone poem *Peter and the Wolf* by Sergei Prokofiev accompanied by a picture book. It has had an important pacifying effect on the kids as they repeatedly endured 600 km per day road trips through the prairie grasslands and aspen parklands of Western Canada to and from my parents' rural home. But while my children love this composition, I have come to hate it, not as a piece of music but as a piece of culture that inculcates a worldview in children – as socialization. Philosophically, it is emblematic of why the putatively non-dualistic "Old World" view of cultured landscapes is not a viable alternative to the dualistic, "New World" view of wilderness. I propose an alternative derived from a cultural landscape activity which is familiar to both contexts: hunting. Hunting is a landscape culture that can allow humans to interact with while not dominating what we call wilderness.

13.2 Rural Landscapes as "Cultural" Landscapes

Any environmental ethic is informed by an underlying model which outlines how nature and culture relate. Contemporary thinking about nature remains dominated by the North American concept of wilderness as defined and reified by the national parks system of the United States. This standard model sees "nature" in its truest form as "wilderness," that which is defined as lying outside human culture. However, this so-called received notion of wilderness has come under criticism by a diverse

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range of Anglo-American philosophers. In general, the criticism is that wilderness conceptually and literally *excludes* human presence and especially human activity from nature.

J. Baird Callicott argues that there is no fundamental distinction between humanity and nature. In his words, "human works are no less natural than those of termites or elephants. Chicago is no less a phenomenon of nature than is the Great Barrier Reef…" (Callicott 1992, 18). Indeed, even aboriginal peoples modify their environments, and besides, contemporary civilizations have already polluted every last square inch of the planet anyway.[1] Furthermore, very few contemporary societies have access to anything like wilderness. One reason for environmental philosophy to move beyond the wilderness ideal, then, could be that most people can relate to rural landscapes.

Val Plumwood (1998, 666) repudiates Callicott's "wilderness skepticism" and asserts a continuum between the dualistic poles of (pure) nature and (pure) culture to allow a variety of hybrids in the middle, thus valuing both reformed urban living and unoccupied wild spaces. By contrast, Donna Haraway's theory of hybridity is opposed to any semblance of hegemonic organicism. She explicitly embraces "illegitimate fusions of animal and machine", going so far as to advocate "'technological' pollution" (Haraway 1991, 174, 176). Underneath all these monisms and hybrids lies the assumption that "pure" wilderness is not human, and that urban sedentism characterizes human culture per se.

Given that Europe almost completely lacks wildernesses and so only has primarily rural landscapes with which to interact, perhaps an Old World perspective can provide a more *inclusive* model of the humanity-nature interface that concretely builds on hybridity's critique of wilderness without falling into cyborgism or the baptism of pollution. The European environmental philosopher Martin Drenthen has written extensively on both wilderness and the application of landscape hermeneutics to contemporary environmental issues in the Netherlands. He speaks eloquently of "traditional" Dutch agricultural landscapes, which can be read as texts that tell us how the people there have dialogued with the land. He says, "In this ancient, small scale landscape, culture and nature merged more or less organically into a meaningful whole, where biodiversity and cultural diversity go together" (Drenthen 2009a, 290). Speaking more generally, traditional European agricultural landscapes can be understood as *cultural* landscapes, hybrids of human artifice and the nature that lies beneath.

Drenthen argues that human place attachments to outdoor landscapes derive from *lived engagement* with a particular and significant location. Non-traditional and industrialized monocultures reflect the modernist conception of neutral "space" as an empty abstraction, whereas Old World rural landscapes embody the value-laden conception of "place" because of their meaningful attachments with real people. Meadows, fields, polders and even villages reflect an attuned interaction and blending between human culture and the environment of which it is a part. It is this delicate conversation between humanity and nature which the landscape interpreter learns to read; by contrast, the unending suburbs of my Canadian city offer virtually no reason to consider how human culture might be fruitfully and symbiotically integrated with more natural elements.

[1] Callicott's second point follows McKibben (1988); cf. Callicott 2002, 301.

But wilderness still lies outside either of these models of humanity-nature interaction, the only difference perhaps being the quantity of wilderness or near wilderness in Europe as opposed to North America. The Low Countries are perhaps unique in that ecological restoration very often involves *rewilding* previously de-wilded, rural landscapes. Willem Van Toorn worried that this would make the traditional Dutch landscape just as illegible as an indiscriminate monoculture, but Drenthen argues that these restored landscapes still contain features that can be interpreted hermeneutically (Drenthen 2011, 128). And yet (originally? fully?) *wild* landscapes do not appear to be legible for Drenthen. As soon as we read them, they cease to be wild, because wildness lies outside human symbolic appropriation both literally and conceptually. It is that which precedes legibility, that which is not appropriated and yet must be appropriated, which is why our contemporary desire to experience it 'in the raw' is profoundly ironic: "in our postmodern age, we seem to have become too self aware and too aware of the contingency of each particular appropriation of nature. Postmodern wilderness desire could be a symptom of this nihilistic self-awareness: we long for something that is not interpretation because we seem to lack a culture of nature – are not at ease in any cultivation of the world" (ibid., 134).[2] This wildness for which we long is, for Drenthen, the uncultural and the uninterpreted, a longing that cannot be fully satisfied because all meanings are cultivated cultural interpretations. Drenthen is speaking about hermeneutic cultivation, but as I shall argue below, this hermeneutic closely parallels the logic of *literal* rural hybridity: culture and nature are defined in mutually exclusive terms, cultivation is the paradigm of human activity, and such appropriation is seen as an intrinsically dewilding force. The "unbridgeable gap between nature and ourselves" refers not only to the extra-discursive as such, but also the inability of postmodern human beings to literally be at home in the literal wilderness. That is, the "sense of alienation that is presupposed in the concept of wilderness" reflects the equation between tilling the soil and cultural significance that is reified in the traditional European landscape (Drenthen 2009b, 313, 314).

13.3 Peter and the Wolf

Drenthen says that he is not articulating his own nature-culture metaphysics so much as the understanding implicit in existing, everyday Dutch conceptions of nature, culture and wilderness – and then working towards ultimately transcending those categories. This is a valuable method and goal, and my point is not to criticise Drenthen so much as to illuminate precisely these everyday categories as "Old World". Dutch landscape hybridity is a logic which entails a notion of wilderness as

[2] Drenthen notes here that his understanding of wilderness is developed in earlier writings (Drenthen 1999, 2005, 2007), but its implications for landscape hermeneutics and the illegibility of wild places (spaces?) were drawn out in more detail in an earlier version of this paper presented at the Sixth Annual Joint Environmental Philosophy Meeting, Allenspark, Colorado, USA, 17 June 2009.

unculturable and thus exclusive of humans – that is, the very received notion of wilderness which a European appreciation of cultural landscape was supposed to free us from! If there are "cultured" landscapes, it is necessary that we posit "uncultured" landscapes as well. While wilderness environmentalism tries to overcome the devaluation of nature by inverting the dichotomy, hybridity environmentalism tries to overcome wilderness environmentalism by prioritizing the dewilding of nature achieved by agriculturing. Moreover, the dialectical nature of wilderness' necessary entanglement in hybridity is value-laden; to be "uncultured" is to be inaccessible, unattainable and ultimately inappropriate for meaningful human dwelling. *Humans cannot belong in wilderness either conceptually or literally*, and so the logic of cultural landscapes prevents human beings from being a part of (this kind of) nature *just as much as the received notion of wilderness does*. The Old World approach to wild nature is just as exclusionary as the New World approach.

The orchestral tone poem *Peter and the Wolf* by the Russian composer Sergei Prokofiev supplements this notion of cultural landscape with what we might call "traditional European ecological knowledge." His work is useful because it tells us what Old World *and* New World Europeans already "know" about humanity, hybridity and wildness – and this folk knowledge, deeply ingrained in mainstream thinking about nature and inadvertently perpetuated by environmental philosophers, is interventionist and not at all conducive to wildlife and habitat conservation.

Peter and the Wolf tells the tale of a brave boy named Peter who ventures out of the confines of his walled yard into a meadow, despite the warnings of his grandfather about the dangers of wolves. Of course a wolf does emerge from the forest but Peter – with the help of several animal friends – is clever enough to capture the wolf and march it triumphantly into town (he takes it to the zoo).

The story is organized around three locales or places: the domicile, the meadow and the forest. First, the *domicile* is secured by a wall and a gate, dramatically separating the sphere of humanity and safety from the realms beyond. Second, the *meadow* is the stereotypical European rural landscape: bucolic, pastoral, and a dwelling place of friendly animals (the songbird). It is an intermediate place, a blend between the confines of domesticity and nature in the raw. Third, there is the looming presence of the *forest*, the unhybridized, uncultured landscape which lies at the edges of the meadow and out of which emerge dangerous wild animals and savage humans who hunt.[3] The forest is not an intermediate place, but a place beyond the edges of comprehension where no culture (worthy of the name) can exist (see Harrison 1992).

These three place settings correspond to the three classes of human characters. The hero of the hybrid zone is obviously Peter. He communicates with friendly wild animals (the songbird), protects them from unfriendly domestic predators (the cat), is unafraid of wild predators (the wolf), and is repeatedly described as *clever*. The heroic character cannot remain constrained by the domestic stronghold. The grandfather, however, is no hero, but a benighted, fearful and weak farmer who avoids the

[3] "Savage" is an etymological derivative of *silvaticus*, or forest-dweller.

danger of the hybrid zone by remaining in his environmentally gated community.[4] Nevertheless he is relieved and impressed by Peter's clever solution to the problem posed by the wolf, once he overcomes his anger at Peter's disobedience. He takes up the rear in Peter's triumphal procession. Finally, the hunters are forest dwellers and portrayed as non-heroic fools; they follow the wolf's trail within the forest, eventually tracking it to Peter's meadow. They discharge their firearms the entire time which, of course, is not a good way to sneak up on an intelligent wild animal. Peter enjoins them to not shoot the wolf, and so they march directly behind Peter and help him take it to the zoo.

The four nonhuman animal characters, meanwhile, are combinations of two sets of distinction: wild vs. domesticated, and carnivorous vs. (functionally) herbivorous.[5] The songbird is herbivorous and the only native dweller of the hybrid zone. Even though it is a wild animal, it helps the hero outsmart the wolf. It sings Peter's praises (and its own) in the final procession. The duck, though herbivorous, is domesticated and thus comical and pathetic. It is usually confined to the gated domicile, and is mocked by the songbird because its wings are clipped. Its inability to fly leads to the wolf eating it. The cat, because it is domesticated, also dwells in the domestic stronghold, but as a carnivore, is sly and stealthy, trying (comically and pathetically) to catch and eat the songbird. It accompanies the peasant Grandfather at the rear of the procession. The wolf, of course, is both wild and a carnivore, and we *know* what that means: "big, gray, … wicked, greedy", and angry.[6] Impressively, all it takes is a single gulp to swallow the duck whole, but thankfully the hero and his wild herbivore friend are ultimately more clever than the wolf.

Prokofiev's inhabited locations are instructive because they remind us that the "cultured" landscape is dialectically related to the uncultured landscape of the wild forest, even if hardly any traces of the latter remain in Europe. The hybrid landscape is thus defined in opposition to the "pure" uncultured wilderness because the former is literally constructed by "clearing" the latter. While Prokofiev is unaware of this dialectical relation, Drenthen (2005) recognizes wilderness as a "border concept". On the one hand, he rejects traditional landscape conservatism and defends ecological restoration projects that "rewild" rural Dutch landscapes. "New wildernesses" can uncover prehuman landscapes which can nonetheless be significant for human beings (Drenthen 2009a, 294). Drenthen suggests that we should have a multi-layered understanding of a meaningful landscape, where both human or cultural and nonhuman or natural layers are integrated into a co-authored whole. Yet on the other hand, wilderness can only be a border concept *if* it is seen as an uncultured place where

[4] In English, a *boor* is not clever but a "rustic ill-mannered fellow", a pejorative term derived from the more neutral Dutch word *boer*, for "farmer" (*The Concise Oxford Dictionary of English Etymology*, s.v. "boor").

[5] Technically ducks and most songbirds are omnivores, but because – like seeds and nuts – insects shed no blood, Prokofiev's neat categorizations and contrasts present both birds as trophically benign in contradistinction to carnivores.

[6] Prokofieff (1961). This book does not have page numbers, but I understand its English text to be a close translation of the Russian original.

human beings cannot be at home – except in an ironic sense, where our own alienation from nature is at home in the alien wild (ibid., 303).

These two European perspectives share the view that wild places lack culture and are in a sense inhuman, even though for Drenthen this is paradoxical and tragic whereas for Prokofiev it is unremarkable. On further examination, it also becomes clear that they both assume that human culture entails a violent confrontation with the uncultured Other. For Prokofiev, this is seen in the conflict with the wolf. The nature-culture blending which constitutes the hybrid meadow is profoundly asymmetrical. While the meadow is depicted as an harmonious playground where Peter, the duck, the songbird and the cat all comically interact, this cultured landscape is a vulnerable human construct that lies outside the garden walls. All who enter the hybrid zone are in danger of being eaten by the wolf who is also free to invade and violate it. The duck, because it has been domesticated by human design, is a (putatively) harmonious nature-culture hybrid constructed by humans. But being domesticated, the duck lacks the ability to defend itself, requiring it to remain behind the gated walls like Peter's timid peasant family or, if it wanders into the liminal meadow, leaving it profoundly vulnerable to the powers of unbridled nature embodied by the wolf. The wolf, being wild, untamed and thus uncultured, is viewed as an intruder in the hybrid realm because of the threat it poses to this "domestic order" (Kover 2009).

Peter, by contrast, is no threat to the hybrid landscape but rather its heroic master; the human *owns* the cultural landscape by virtue of its having been cultured by humans. Peter is presented as transgressing the nature-culture binary, being neither constrained by walls nor afraid of the wolf. Though he is unable to prevent the wolf from eating the defenceless duck, he utilizes the help of the undomesticated songbird to protect the domestic cat by capturing the wolf through trickery. In a move reminiscent of Adorno and Horkheimer's *Dialectic of Enlightenment*, Peter does not descend into the animality of the hunters who, by wishing to kill the wolf, would be mimicking the wolf's own bloodthirstiness. Rather, the true hero maintains rational distance from nature's (putatively) "pure" form by refusing to kill the wolf. Peter outsmarts it, tying it up and triumphantly parading it to the zoo. For Prokofiev, then, the very essence of wild nature is a threat to human culture per se, and the solution to this problem is to construct and defend a harmonious hybridization and *taming* of nature while paradoxically trying *not* to imitate nature's own dominating and threatening wildness.

Adorno and Horkheimer (1997) recognize this logic as self-defeating, because it solves the problem of being dominated by the Other by dominating the Other in turn. Drenthen is attuned to this irony: even though he sees harmony and symbiosis as the goals of his landscape hermeneutic, he uses the language of domination to describe those cultural landscapes characterised by human cultivation and domestication – i.e., traditional agriculture:

> By showing how the landscape must have been like before humans dominated the landscape and releasing the natural forces that early inhabitants had to deal with, we can deepen the scope of our sense of place…In the history of human cultivation and domestication of the landscape, people almost always were aware of the difference between cultural landscapes

> and "pure" nature…Nature development could give us a sense of how the natural world would have looked like if humans would not dominate the scene – it could help us regain a sense of what is "normal" and "in tune" and what isn't (Drenthen 2009a, 293–295, 303).

He goes on to acknowledge "the actual "detached" or "alienated" relation we have with the land" which Peter does not realise he has (ibid., 302).

Being more clever than Prokofiev's hero, Drenthen takes this dominating alienation from the land as his starting point for interpreting rewilded landscapes: wilderness is a non-place which excludes human beings and human culture, but is eminently fitting to us postmoderns who cannot feel authentically at home in any place at all. Moreover, postmoderns know that the a-cultural and symbolically empty wilderness is an artificial construct which mirrors their own alienation from nature, reflexively confirming the assumption that nature is meaningful or pleasurable only when it has been placed under rational control.[7]

13.4 The Metaphysics of the Barnyard

What we find, then, is that these Old World perspectives reinforce rather than escape the oppositional logic of the nature-culture dichotomy and the received notion of wilderness as exclusionary, uncultured and inhuman. The "unruly" and uncultured forest wilderness lurks in the shadows cast by the traditional European landscape, which is a hybridity enforced by human heroism that views the Other-than-culture as a threat (Drenthen 2009a, 305). Both the received notion of wilderness and European approaches to hybridity say that human beings cannot belong in wilderness. The only substantive difference between the two is that the former prioritizes human exclusive landscapes for (putatively) nonanthropocentric reasons, while the latter prioritizes agricultural landscapes (and possibly urban landscapes as well). Both the Old World and New World approaches have yet to overcome the problem of alienation or exclusion from nature lamented by the critics of the received notion of wilderness.

I suggest that the way out of this conundrum starts with paying closer attention to two of Drenthen's own remarks. Doing so, moreover, will rescue the figure of the hunter from Prokofiev's derision. First, consider the semantic range of Drenthen's landscape hermeneutics: the cultural appropriation of nature is conceptually equivalent to dewilding, cultivation, domestication and domination. I argue that we must not understand "domination" and its hermeneutic analogues in a value-neutral way, but critically consider the actual practices from which these concepts derive. Both domestication and domination share an etymological root: to domesticate is literally to "house-train" (from *domus*, domicile) whereas domination derives from the *dominus*, the master or lord of the household. Animals are obviously not landscapes,

[7] "Of course, one could argue that the idea of these places somehow represent the not-yet-symbolised is itself another symbolised meaning, but whether that paradox will prove to be a killing objection is yet an open question" (Drenthen 2009a, 303).

but domestication is best understood via the familiar figure of the domesticated animal. Speaking from the ostensibly value-neutral perspective of scientific description, Jared Diamond (1997, 159) defines a domesticated animal as one "selectively bred in captivity and thereby modified from its wild ancestors, for use by humans who control the animal's breeding and food supply. That is, domestication involves wild animals' being transformed into something more useful to humans." In terms familiar to environmental ethics, domestication is simply reified anthropocentrism. Indeed, Holmes Rolston, III (1992, 271) notes that from the "wilder perspective the domesticated is the degraded" (cf. Rolston III, 1988, 78–79). Paul Shepard goes further, arguing that the domestication of animals was not a covenant freely entered into by both parties, and in fact results in the non-symbiotic, genetically crippled slavery of animals (Shepard 1993, 285–287; 1982, 38; 1992, 74). In his words, domestication is a failure to "respect…the other on its own terms" (Shepard 1993, 287).

"Cultured" animals – domesticated hybrids of "nature" and "culture" – are thus morally suspect rather than benign, for they raise the spectre of the domination of alterity by a human self. Furthermore, "uncultured" animals fare rather badly according to the logic of domesticated domination – case in point, Peter's treatment of the wolf! Peter, the hero who dwells fearlessly in the hybrid landscape, treats the wolf as a threat to be contained because it is a wild carnivore which cannot be domesticated (unlike the duck and the cat) and endangers the domestic order (the duck, the songbird, the grandfather and Peter himself). The wolf must be dominated because hybridity simply cannot tolerate organisms that will not or cannot be hybridized.[8] At the same time we must realize that hybridity avoids killing wild animals *so that* they may be dominated: Peter refuses to kill the wolf not only because doing so would implicate him in the wolf's dominating logic of wild predation, but also because one cannot be master and commander of a dead animal.[9] Only the living can be controlled. The ethics of hybridity are thus the ethics of castration and the cage. At the individual level, at least, hybridity is domination, either by genetic enslavement or simple incarceration, and so cannot be assumed to be morally unremarkable.

Second, recall Drenthen's suggestion that the concept of wilderness as uncultured and inhuman is a contingent *social construction*. Indeed it is! But this means not only that so-called wild landscapes are epistemically cultured, but also that they are metaphysically cultured. Noble savage debunkers will always remind us that even non-agricultural aboriginal peoples actively maintained ecosystems to ensure preferred conditions – e.g. through burning (Day 1953; Kay 1994; Lewis 1995; Nadasdy 2005). Far too much hay is made of this point, however. Rolston argues convincingly that "there is no reason to think that the Indians by deliberate fire policy really modified the regional grasslands ecology of the vast American West" (Rolston III, 1994, 190). Foraging cultures rather alter their environments in

[8] Diamond (1997, 168) also notes that only fourteen of the world's 148 "big terrestrial herbivorous mammals" are suitable for domestication.

[9] And so, according to Adorno and Horkheimer (1997), Enlightenment seeks to overcome domination by dominating it, and thus never escaping (what it thinks is) the barbarity of nature.

ways that mimic prior ecosystemic processes (e.g., lightening lit grassland fires), on the apparent assumption that wild nature already possesses an order of its own which humans may or may not align themselves. All lifeforms alter their environments, humans included, but *being human is not dependent on altering the environment in an agricultural way*.

Indeed, human cultures have flourished within cultured wildernesses for at least 90 % of our species' timeline, and the reason why they no longer do so in North American parks is because they were forcibly evicted in the twentieth century to more accurately reify the acultural ideal of uninhabited wilderness (Spence 1999). Wildernesses cannot be exclusive of humans because *humans live(d) there*. It is rather inhuman to take humans out of wilderness! To understand "wilderness-as-inhuman" as a social construction made possible by European imperialism means that, at the bare minimum, *wilderness is not inhuman, uncultured or inhospitable to human dwelling*. Of course, it has been the time-honoured practice of agrarian peoples throughout history to view "humans outside the boundaries of one's community … as chaotic and evil … less than human [and] essentially feral and immoral" (Kover 2008; paraphrasing Sanday 1988, 83–87). This is why the word "savage" (forest dweller) has taken on such a pejorative connotation in (so-called) civilized societies, even though it is obviously false that humans who live in wildernesses are not also fully human, cultural and social beings. Being agricultural or urban (i.e., civilized, from *civitas*) is not a necessary condition of being human or cultural. A wilderness (conceptually or literally) lacking hunter-gatherers is a colonialist, racist and misanthropic social construction which cannot simply be accepted as a fait accompli.

At the very least, then, to call a traditionally agricultural landscape a "cultural" landscape is a misnomer, because doing so implies that other cultural landscapes – in this case, wildernesses – are not cultural. And yet the fact that wildernesses *are* (can be) cultured human homelands does not change the fact that they differ significantly from traditionally agricultural landscapes. Just as the existence of twilight does not make the concepts of "day" and "night" hopelessly problematic, there is no reason to reject a vernacular semantics which sees that forager managed landscapes are "wild" while the landscapes remade by agriculture are not (Plantinga 2000, 202).[10]

Moreover, as Drenthen (2009b) argues elsewhere, some appropriations of nature are more appropriate than others. Therefore, not all cultured landscapes are equal; domesticated landscapes should not be uncritically accepted any more than domesticated animals. Recall that Drenthen speaks of dominated landscapes in terms of *cultivation* or tillage. While the word "cultivated" is often used as a synonym for intelligence, this not only carries forth the racist presuppositions of agrarian rationality but also fails to see agriculture in anything other than environmentally benign terms. But an agricultural landscape is one where the soil has been "worked," where the native foliage cover has been removed. I have in mind here what Colin Tudge calls arable farming: "breaking the soil in an entire field as a preliminary, removing the natural flora, and beginning with a *tabula rasa*" (Tudge 1998, 6).

[10] Paraphrasing Dr. Samuel Johnson. See also, Felipe Fernández-Armesto (2007, 37) for more on the comparison between the effects of foraging and farming on the landscape.

The same can be said, in general, of stick hole horticulture and nomadic pastoralist grazing, namely that "Farmers seek to influence the environment, to manipulate it, in ways that increase the amount of food that is available and consumable" for and by humans and their livestock (ibid., 5). Agriculture is thus a reified anthropocentric reorganization of the landscape.

So while it is a false dichotomy to distinguish agricultural from wild landscapes on the basis of unpredicated "culture," the real differences between these two broad forms of landscape must be accounted for in terms of predicated and thus *different kinds of* culture. So-called hybrid landscapes are *produced* by agrarian cultures which "clear" the land, "break" the sod, introduce domesticated plants and animals, and then defend those dominated lifeforms by weeding (the removal of recurrent, often indigenous plants), irrigating (in case the weather does not "cooperate" with agrarian construction), and predator "control" (the elimination of "vermin," like the extirpation of wolves). Shepard (1999a, 118–119, 125–127, 129–130) thus argues that agriculture entails ecological degradation and anthropocentric lordship. This is seen not only in the relatively recent "dust bowls" of the North American Great Plains, but also the domesticated sheep and goats which denude uncultivated land causing both the erosion of Eurasian uplands lamented as long ago as Plato (*Critias* 110e–111d), and the deceivingly peaceful blanket of turf which covers the ruined cultures and ecosystems beneath. Domestication's domination of wild species is a necessary condition for agriculture's domination of wild landscapes, leading Dean Freudenberger to call agriculture "the most environmentally abusive activity perpetuated by the human species" (Freudenberger 1987; cited in Shepard 1992, 57). Even Drenthen (2009b, 314) will say that the notion of wilderness as inhuman conceptual void is a projection of the alienated postmodern self, and not of "most native peoples living in fairly natural environments."

Making the full case for agricultural hybridity as environmental domination is outside the scope of this paper, but it may help to simply consider the following photograph (Fig. 13.1) of a traditional European agricultural landscape in the islands of the Azores.

The Azores, settled by the Portuguese in the fifteenth century, look the way they do now not simply because humans colonized them, but because the colonists were *farmers*. The islands would look much different had the colonists been and remained foragers; i.e., they would appear much the same as the "nature reserves" on the islands presently do. If we ask who or what is the lord of this landscape, or who or what is the source of its order, the answer is not *simply* "humanity" or "culture," but rather the contingent and constructed culture of domestication.

It appears that traditional European cultured landscapes are *literally* as Drenthen's conceptual language suggests: a peace enforced by anthropocentric domination to the genetic and ecological detriment of so-called uncultured landscapes, animals (including people) and plants. But we shouldn't focus on actual subsistence practices to the exclusion of hermeneutics, because agricultural civilization brings with it its own deep-seated and often incognito conceptual categories: a domesticated metaphysic. We have already seen how the city and cultivation become the veritable *terms* of moral and intellectual virtue, but even conceptualisation itself becomes understood

Fig. 13.1 Terceira Island, the Azores, Portugal (Copyright 2011 by Nathan Kowalsky)

in terms of domination – as if there were no way to understand the other without violating its otherness. Meaning *must* be an anthropocentric projection, if "culture" is defined in terms of domestication and tillage. And yet many recent Continental philosophers are attempting to do philosophy outside this history of philosophy, to understand conceptualization outside the framework of intellectual mastery. We might do well to understand Derrida's *différance* or Marion's icon as attempts to break free of the metaphysics imposed by the "physics" of agriculture.

Whence this metaphysic? The sharp conceptual distinction between wild and tame only arises in a context where landscapes, animals or plants have already been dominated by domestication and agriculture. According to T.R. Kover (2008, 236), agriculture "depends on a decisive separation between the natural and the human world, a state in which the former is seen as completely compliant with human ends and needs and the latter is seen as defiant and antagonistic to the natural world". Agriculturally dominated landscapes are not only clearly different from wild landscapes, they must be *made* to be different *against* the resistance of the landscape to that form of culturing. Gardens do not come easy, nor does clearing, groundbreaking or other forms of earthmoving.[11] Moreover, as we have seen with Prokofiev's

[11] This is not to say that some forms of gardening or agriculture are less out of step with the original recalcitrance of the land than are other forms of gardening or agriculture. Cf. Glenn Deliège's contribution to this volume.

wolf vs. duck, undomesticated wild life becomes a literal threat to stunted and vulnerable domesticated lifeforms.[12] Wild nature is a genuine economic threat to agriculture because domestication makes animals and plants vulnerable (placing them in pens, removing many of their defence mechanisms). Therefore, humans *create* a situation where they are forced to defend these relatively helpless lifeforms against what would otherwise be perfectly normal ecological interaction. This constructed economic opposition to wild nature produces a more general sense of nature-culture opposition which becomes a full-blown cosmology, a metaphysics of the barnyard.[13] Barnyards and fields – i.e., hybrid, "cultural" landscapes – *must* be defended against encroachment by the wild. No wonder "pure" nature is so inhuman, so meaningless! The socially constructed view of wilderness as antithetical to human culture which both Drenthen and Prokofiev take for granted is an artifact of the domination of nature. Rather than providing an alternative to the received notion of wilderness, using traditional European agricultural landscape hybridity as a model for environmental ethics produces the idea that the purpose of human culture is to outsmart nature so that it becomes our slave before the inverse happens.

13.5 Hunting as a Non-dominating Landscape Culture

It is incumbent upon environmental ethics, therefore, to decouple its conceptions of both human culture and wild nature from the urban-rural categories of agricultural civilization ("nature" is not "out to get us"). Doing so leaves us with the notion of a wild yet cultured landscape inhabited by non-agriculturalists unashamed by their mimicry of wild nature. If all claims about nature are inevitably cultural and no (ostensibly) "pure" wilderness can exist, then what we may continue to call wilderness must be reconceptualised as an appropriate dwelling place for human beings – even if no such realm exists in any significant quantity in Europe. We should not fail to attend to human cultures (past or present) which subsist in ways that leave wildernesses uncultivated, because such forms of life evidently do not possess social logics which encourage nature-culture dualism.

Second, if hybridity or landscape hermeneutics are to provide any critical perspective on the ecological crisis still facing us after fifty years of environmentalism, they will have to start articulating *which* landscapes are appropriate or non-dominating, and which ones are not. Rather than point at all the ways in which nature is cultural,

[12] "[N]ot only does the wild serve no discernible advantage for the farmer and for agrarian societies in general, but it seems to actively hinder and undermine … the domestic human order" (Kover 2008, 240; cf. Shepard 1982, 23, 28, 35).

[13] I owe this turn of phrase to T.R. Kover, who in turn derived it from Paul Shepard's treatment of "the ethic of the barnyard." See Kover (2012); Shepard (1999b, 60–61); and Shepard (1967, 190–205). To our knowledge, Shepard did not articulate his ethic of the barnyard as a metaphysic per se.

we should be trying to find out how our cultures can be natural! Europeans could do worse in this regard than consider the figure of European hunters, especially when plebeian rather than aristocratic, who are not at all the barbaric buffoons Prokofiev makes them out to be. More at home when in the out of doors, the "men in green" constitute a culture of the wild who transgress the binaries implicit in traditional rural landscapes even while coexisting with them out of necessity. I propose, therefore, the taskscape of hunting (or gathering or foraging) as an alternative to the heroic barnyard mastery of unruly nature.

Hunting, however, is a profound enigma to the agricultural mind. By the standards of laborious serfdom, foragers are as the lilies of the field – they neither toil nor spin. Indeed, the etymological root of "culture" is *cultus*, or work – and through agricultural eyes hunting is not work, leading both to resentment and the derision of hunter-gatherers as lazy. In mainstream environmentalism there is profound ambivalence (if not antipathy) towards hunting and, in especially critical animal studies, toward predation itself.[14] Our culture routinely labels sex offenders as "predators." The metaphysics of the barnyard inevitably conceive of predation as a threat, and indeed death itself is worse within the context of agriculture than without. Unmastered death – i.e., when the farmer does not freely kill her animals or plants – phenomenologically steals property from the farmer, her "live-stock" and the hard-won investment of time and labour that veritably sustain her own life. Death is not just an existential or philosophical enigma for the agriculturalist, but a thief emerging from the realm of uncultured chaos apparently aiming to deprive the domestic order of all that it has worked so hard to heroically master.

Not only do hunters kill animals, moreover, they kill animals *like animals*. Prokofiev mocks hunters for mimicking predation, and Adorno and Horkheimer view mimesis of nature as unenlightened because it means surrendering to nature's domination of us. Hunting's intimate involvement with pain and death is why it looks like obvious savagery and (illegitimate) domination to the Enlightened spectator, all the more so when it is practiced recreationally instead of by "necessity." Besides, mimicking wild nature smacks of Social Darwinism. However, these complaints can only be advanced within the confines of the metaphysics of the barnyard. Lewis Mumford (1934, 186–187) argues that Social Darwinism does not derive from evolutionary theory so much as assume a picture of nature skewed by the projection of Victorian industrial malaise onto the nonhuman world. To think that hunting surrenders to nature's domination of the self-made self assumes that wild nature is indeed an inhuman chaotic threat, and thus "a false attribution of civilized problems on to the 'savage', a projection by the suffering, civilized mind" (Shepard 1993, 295). There is nothing wrong with acting "like animals" unless by that we mean acting like genetically stunted and socially caged barnyard slaves or the vermin that threaten the same. Put simply, hunting cannot be made sense of in terms of agrarian hybridity because it fits into *neither* the category of domestic reason *nor*, truth be told, the category of the inhospitable wild antithesis to "humanity".

[14] E.g., Varner (1995); Cowen (2003); Nussbaum and Faralli (2007); Raterman (2008); as opposed to Callicott (1980); Hettinger (1994); Kover (2010).

As to the landscape, there is no need to belabour the point that hunting has no need of ecological reordering for it to succeed. It generally takes the landscape as a given and operates therein, which is why it can occur equally well on agricultural lands and their fringes as in robust wilderness areas (if legally permitted). Hunting as a landscape practice is far and away more mimetic of the phenomenologically prior natural order than are agriculturings; no "clearing" is required. In terms of Rolston's environmental ethic, hunting will follow nature "homeostatically" because it does not compromise the systemic integrity of the landbase's processes – unless of course it is practised without regard for a species' capacity for regeneration.

In terms of hermeneutics, however, I am struck by the slogan found on the label of Jägermeister liquor bottles: "Das ist des Jägers Ehrenschild, daß er beschützt und hegt sein Wild, weidmännlisch jagt, wie sich's gehört, den Schöpfer im Geschöpfe ehrt." The sign of the hunter's honour is that he protects and preserves the game animal, hunts like a dweller of the forest to which he belongs, and honours the Creator in creatures – what mystery is this? Where is the domination of nature? *In spite of* the agricultural mastery of the European (and indeed global) landscape, something survives in the Weidmensch which anthropologists recognize about forager cultures – that their form of subsistence does not encourage the view that hunting or culture is dominion, but rather *exchange* between humans and other animals who have *their own* cultures (Kover 2008, 238). Richard Nelson suggests that animal others are viewed as more intelligent than human beings: "A Koyukon elder, who took it upon himself to be my teacher, was fond of telling me: 'Each animal knows way more than you do.' He spoke as if it summarized all that he understood and believed. This statement epitomizes relationships to the natural world among many Native American people" (Nelson 1993, 108). From an Anishinabe perspective, the human ability to hunt is seen as a result of our being instructed in the pathways of life by the wild animals that precede and environ us: "In the end, Nathan 'the hunter' came to understand hunting through the skills and abilities gifted to him by the very creatures he was hunting – gifts which he remained ever grateful for…" (Wawatie and Pyne 2010, 104; cf. also 96–98). Rather than viewing wild animals as oppositional threats, hunter-gatherers delicately navigate animal otherness through ritualistic ties of respect: "there is no vague 'identity with nature', but rather a lifelong task of formulating – and internalizing – treaties of affiliation" (Shepard 1982, 34).[15] Hunting does not encourage a view of wilderness as an empty, inhospitable wasteland, but rather as a home shared with a wide range of nonhumans possessing orders all their own.

The surprising irony, then, is that agriculture can be accurately understood as forcibly making nature "one" with the civilized conception of humanity, whereas hunting as a landscape culture recognizes the legitimacy of wild nature's meaningful,

[15] Shepard (1993, 289–290) also notes that these treaty relationships were always understood metaphorically, but that animal domestication collapsed the distinction between literal and figurative. I would suggest this as another reason why Social Darwinism can only arise within an agricultural context.

transcendent and non-adversarial alterity within which humanity finds its fit.[16] As Kover puts it, "far from the foraging mind seeing itself at one with its environment, the domesticated mind appears to want to make its environment at one with it."[17] Speaking of my own experience of hunting in both Canada and Germany, I know that I must treat the animal I seek as intelligent, on the lookout for my presence, and exceedingly capable of avoiding my presence. The animal can be found only by my being-as-nothing (hiding and waiting) or by interpreting signs (tracking and stalking), because it has not been locked within an enclosure (French for "farm" is *ferme*). *If* the animal is found (and often it is not), I can take my shot (itself no guarantee) only if it presents itself to me in a particular manner – by not discovering me, staying in range, and turning to the broadside. None of this is within my control. Indeed, I have spent what felt like hours in a Hochsitz veritably begging the animal to not only appear, but to approach through the fields in the way that I needed it to. And even when I have succeeded in killing the animal, I know that even in that moment I have not captured it, for the dead body is only a trace, not the thing-in-itself. At every step the prey is elusive rather than mastered, enchanting and sobering all the way.

Attending to wild animals in this way places me within the circles in which they move; hunters must ignore many of the boundaries set by agrarian reordering (fences, hedges, ditches, roads – to say nothing of disinterested spectatorship), because that's what their prey do. Rolston says that cultures which follow nature "tutorially" possess a sense of place and belonging *in* nature, and we have seen hunting to be structurally at home in even wild nature. I credit hunting with the zealous place attachment I have to the shortgrass prairies of southeastern Alberta, the home of my upbringing and my undying desire. Moreover, following nature "axiologically" includes participating in natural values so as to know them firsthand, much like what Alan Holland and Simon James suggest about gardening in this volume. But as Rolston says, "[i]n ways that mere watchers of nature can never know, hunters know their ecology"; the natural axiology known by gardening is not the same as the one found in the ancient forest or the great plains. (Rolston III 1988, 92; cf. Kellert 1978, 422). Indeed, Adrian Franklin argues that "hunting and fishing provide an absorbing and exciting sensual engagement with the natural world and frame what hunters and anglers see as an alternative environmentalism, with humans *in* the landscape, not skirting nervously around its edges as 'organized tourists'" (Franklin 2001, 75). Stereotypical "red-neck" hunters (like the cartoon character Elmer Fudd) may embody Prokofiev's stereotypes, but the logic of hunting is more revealing when we step away from the logic of the barnyard.

[16] I offer one caveat here: there is a form of hunting which intentionally pursues "dangerous game", such as grizzly bears, lions or Cape buffalo. Theodore Vitali (2010, 24) notes that "[i]n this model, the hunted animal is perceived as a threat to the hunter and thus the hunter-hunted relationship is viewed as mortal combat in which there is parity of danger: for one or the other, the outcome will be final."

[17] T.R. Kover, e-mail message to author, 6 December 2011.

13.6 Conclusion

Hunting likely sounds too unfamiliar, anthropological and distant in both time and space to have any relevance to environmental debates in the Old World. But it is not. For example, I understand that hunting is not permitted in the Oostvaardersplassen, although some culling is permitted to mitigate the suffering of large herbivores which would otherwise starve to death.[18] This indicates, first of all, that hunting culture is not foreign to the Netherlands, even though it may be infected by aristocratic or agricultural assumptions (as it is all over the world). Second, hunting appears to be excluded from the Oostvaardersplassen for the same reasons it is excluded in the North American parks: humans are not supposed to interfere with wild nature because such contact undermines the system's ideal naturalness.[19] Evidently the most natural thing for humans to do is observe nature at a sanitized distance, enacting classical disinterested objectivity. And so we return to Peter, the hero who rules nature by not copying it.

The Dutch metaphysics Drenthen works with do not differ significantly from Prokofiev's. Hybridity discourse in general fails to realise that – first – wildland is not a human exclusive substratum which, with the admixture of agriculture, becomes a "cultural" landscape, and that – second – this mixing is not automatically benign or symbiotic. Because *agriculture does not permit the understanding of humans at home in undomesticated landscapes*, it leaves no option but to accept some measure of domination of the natural Other as inescapably human. But understanding wilderness as a social construction unmasks the notion of European landscapes as harmonious unities; they are rather constructions of a dualism masquerading as a monism where the Other is almost completely smothered, sent subterranean, turned into an inhuman "Same." The radical implication is that no agri-cultures successfully follow nature (we might need to call them "agro-cultures"!). Because hunting can successfully follow nature, it constitutes a landscape culture profoundly subversive of traditional agrarian or techno-hybrid cultures which, rather than following nature, accept dewilding, domination and degradation as par for the course.

Hunting, then, can be a litmus test of nature-culture relations even in Europe. If an ecosystem cannot sustain hunting by humans, then it is not rewilded enough. If hunting is banned in principle, then the metaphysics of the barnyard remain in force against both humans and wild nonhumans. Either way, the resources for investigating a post-civilized embrace of wild nature as a human home still exist on the

[18] ARK, "Death as Part of Nature," http://www.arknature.eu/ark-en/nature-development/natural-processes/predation-and-death (accessed May 4, 2011).

[19] "We see it as our duty in the debate to put the interests of the animals first: are these measures really benefiting the animals? Wild animals are really best off when there is least interference by humans. It is always the hunters who are asking for supplementary feed to be provided to prevent an agonizing demise" (Esther Ouwehand, Member of the Dutch Parliament, Party for Animal Rights). "It really is an ideal situation in the Oostvaardersplassen. Animals dying just happens to be a fact of life. Unfortunately, huntsmen have a really powerful lobby aimed at doing away with this natural system" (Pauline de Jong, Secretary of the Fauna Protection Society; cf. Kleis 2010).

ground in the Old World as well as the New, because hunting as a landscape culture remains even though the undominated landscape might not. No matter where its practitioners dwell, environmental philosophy should be at the forefront of rethinking humanity's place in nature outside the agrarian model of both the intellectual and practical mastery of the world.[20]

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