

## Borders and Boundaries

Relations involving borders and boundaries, their meaning, dissolution, maintenance and transgression, are always in the news in one way or another. This is just as true in contexts designated ‘environmental’ as it is in any other domain; if indeed there are any real concrete domains that can be set apart meaningfully from the environmental.

Eric Katz is a well-known critic of ecological restoration (e.g. Katz 1993, 1997). In the first paper of this issue he takes forward his critique by discussing the comparison often made between the nativist tendencies of some restorationist environmentalism and Nazism (Katz 2014). Restoration aims at the control and elimination of non-native (exotic, alien) species from a landscape or ecosystem. The more the purity of the native environment is emphasised, and the harsher the rhetoric against ‘immigrants’ and ‘invaders’, the more apposite seems the parallel with Nazism, which itself had a notable environmental dimension. Katz’s tactic is not to equate ecological restoration with Nazism, however. Restoration projects may be good in various ways and do not generally aim at fixing in place a landscape that is the pure expression of a master race. Yet there is a parallel. Even without the rhetoric of extermination of exotics coming over here and occupying ecological niches that ‘belong’ to the ‘locals’, the process of restoration is one of control and, when unqualified, implies an ideology of unbounded imperialism and mastery – of the human over the nonhuman.

In the second paper, Rafael Ziegler analyses the different kind of restoration process involved in the European Rivers Network call for the ‘reconciliation’ of citizens with rivers and lakes through such public events as coordinated river jumps and bathing days. What is ‘reconciliation’ with a river? Ziegler explains it in terms of tackling a missing, distorted or incomplete relationship to rivers; an estrangement brought about, for example, by fear and disgust at rivers perceived as threatening, poisonous and alien as a result of industrial and agricultural processes, hard engineering projects and political anxieties (the Elbe used to flow through the Iron Curtain, for instance). Reconciliation is a matter of restoring a harmonious relation to the world (to rivers and to other people whose lives are also bound up with them). Ziegler adds ethical content to this picture through Martha Nussbaum’s capability approach, which proposes a set of capabilities whose development and exercise constitute human flourishing (Nussbaum 2006). Reconciliation with rivers is a pluralistic process encompassing all the capabilities wrapped up with the diverse ‘doings and beings’ people have in relation to rivers. It is a problem then when our relation to rivers is dominated by a narrow economic focus on their roles as means of transport or resources to be managed. But of course some important human capabilities do require rivers to be economic resources: relating to rivers only as sites of recreation would be a problem too. Ziegler concludes that events such as river

jumps are important steps to a wider reconciliation, but cannot be identified with it.

Can we look to new technology to enable processes of restoration and reconciliation without mastery? Sanne Van der Hout considers the role of technology in maintaining or disrupting a peaceful relation with nature. He discusses Peter Sloterdijk's account of the 'homeotechnological turn', a change in the character of technology that holds out the possibility of escaping the ecological crisis without eco-puritanical self-denial. For Sloterdijk, developments in biotechnology, nanoscience, neuroscience and cybernetics involve a homeotechnological approach that 'works with' nature – borrows from it and cooperates with it on molecular and microscopic levels – in a way quite different to traditional 'allocentric' technology, which works by disturbing and radically simplifying natural processes. Because it works with nature rather than invading and mastering it, homeotechnology has huge 'rescue potential'; its widespread use will greatly increase the earth's carrying capacity. Van der Hout points out that whilst there is much to appreciate in Sloterdijk's work it is based on some problematic assumptions: that we already understand nature's workings well enough to work with and mimic them; that even if we do this precludes domination (for example, through genetic manipulation); and that in blurring the distinction between man-made machines and bio-machines the new technoscience won't simply make the domination more subtle and ubiquitous, extending now to the molecular level.

How and where to draw the line between ourselves and a nature with which we might coexist more or less peacefully is a matter of perennial debate of course. In the fourth paper Thomas Kirchhoff and Vera Vicenzotti shed some useful light on this debate by providing a historical and systematic typology of European perceptions of wilderness. There is no need to suppose the idea of wilderness requires some special kind of metaphysical defence to keep it out of trouble (Keeling 2008). Nor is it sensible to seek the one true idea of wilderness. Thus Kirchhoff and Vicenzotti distinguish a range of perceptions of wilderness associated with different worldviews (including theological, liberal and democratic) that arose with the Enlightenment and counter-Enlightenment (Rousseauism, Romanticism and Conservatism), and indicate how they inform in ambiguous ways four more contemporary perceptions of wilderness: as ecological object (where humans are a disturbance); places of nature's self-reassertion (such as unused allotments and brownfield sites); places of thrill and risk (to escape one's regulated and sanitized existence); and a sphere of amorality and meaninglessness (in which morality is suspended).

Another highly significant border lies between one person's property and another's. In the final paper Marc Davidson considers the matter of ecosystem service provision across such borders. Some crucial services (including regulation of climate and water quality) benefit people who don't own the land from which the services issue. What rights and entitlements should mediate

such 'non-excludable' benefit provision? Should landowners charge for them? If their activities end the service provision do landowners owe the recipients compensation? Davidson points out that these questions are usually addressed from a more or less libertarian perspective that brings together property rights and negative liberty (relevant international laws and agreements are based largely on libertarian morality). And conservation of non-excludable ecosystem services is generally thought to require beneficiaries to pay landowners for them (thus incentivising their conservation, rather than conversion into, say, industrial resources). Davidson argues that this is inconsistent with libertarianism in both its 'Right' and 'Left' formulations (a distinction concerning entitlements to appropriate previously unowned things: right libertarianism envisages unlimited appropriation on a first-come-first-served basis; left libertarianism posits an entitlement to equal per capita shares). For example, an analysis of the matter from a right libertarian perspective shows that beneficiaries generally have the right to compensation for loss of service: landowners have the right to convert ecosystems (without owing compensation) *only if* they appropriated the land before or shortly after beneficiaries started receiving services.

Davidson does not advocate libertarianism but argues that its implications are not as usually understood. Although his conclusion probably won't chime with the preferences of the wealthy and their political friends, the correctness or otherwise of the libertarian framework of right and wrong as such is not simply a matter of individual preferences. Nor is it a scientific matter. In different ways all the papers in this issue illustrate the general point that understanding important boundaries, their crossing, dissolution or maintenance, is not only a matter of objective science or of aggregating subjective preferences. Kirchhoff and Vicenzotti emphasise how policy relating to wilderness requires negotiation between different worldviews and associated perceptions. Similarly, Ziegler argues that overcoming estrangement from rivers through reconciliation requires comprehensive, inclusive deliberation regarding the wide diversity of persons and capabilities involved. A crucial part of Katz's argument is that science does not underwrite the native/non-native distinction, which often expresses a dominating attitude that should be challenged whether the 'immigrant' targets of hostility are human or nonhuman. With reference to the work of Val Plumwood (2002) Van der Hout argues that the rescue potential of homeotechnology and the science behind it can itself be rescued only if embedded in a wider culture of ecological rationality that eschews dualistic domination of the nonhuman.

SIMON HAILWOOD

*References*

- Davidson, M. C. 2014. 'Rights to ecosystem services', *Environmental Values* **23**(4): 465–483.
- Katz, E. 1993. 'Artefacts and functions: A note on the value of nature', *Environmental Values* **2**(3): 223–32.
- Katz, E. 1997. *Nature as Subject: Human Obligation and Natural Community*. Lanham, MD: Rowman and Littlefield.
- Katz, E. 2014. 'The Nazi comparison in the debate over restoration: Nativism and domination', *Environmental Values* **23**(4): 377–398.
- Keeling, P. 2008. 'Does the idea of wilderness need a defence?', *Environmental Values* **17**(4): 505–519.
- Kirchhoff, T. and Vicenzotti, V. 2014. 'A historical and systematic survey of European perceptions of wilderness', *Environmental Values* **23**(4): 443–464.
- Nussbaum, M. 2006. *Frontiers of Justice. Disability, Nationality, Species Membership*. Cambridge, Mass.: Cambridge University Press.
- Plumwood, V. 2002. *Environmental Culture: The Ecological Crisis of Reason*. London: Routledge.
- Van der Hout, S. 2014. 'The Homeotechnological turn: Sloterdijk's response to the ecological crisis', *Environmental Values* **23**(4): 423–442.
- Ziegler, R. 2014. 'Reconciliation with the river: Analysis of a concept emerging from practice', *Environmental Values* **23**(4): 399–421.