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Introduction

In September 2003, the fifth World Parks Congress titled *Benefits beyond Boundaries* was held in Durban, South Africa, in a huge conference centre close to the ocean. Dozens of parallel sessions were filled with over three thousand people from around the world. They each represented international organizations, United Nations agencies, non-governmental organizations and universities. They met to set out international nature conservation policy for the following ten years. Despite being the result at the end of a long series of preparatory sessions, for an individual on the ground it seemed an extraordinary place and an extraordinary moment: A huge group of professional people with apparently less than two weeks to define and write out what should be happening in national parks, nature reserves and other areas designated for nature conservation, all around the world. Responding to the main theme and reflecting the location of the hosting country, former President Nelson Mandela made the opening speech calling for international transboundary initiatives that would link parks in several countries to be vehicles of peace and development. The room was abuzz.

As the title *Benefits beyond Boundaries* reflected, international political boundaries were overwhelmingly presented as something negative: as international obstacles to be overcome through new partnerships between states, but also through links between different areas within countries, as well as between conservationists, the private sector and local communities. The idea was to use nature, boundless nature, to unite people. At the same time, ironically, and despite the talk about having to move beyond boundaries, the meeting was held in a vast conference centre surrounded by barbed wire, high fences and tight security patrols. Meanwhile, in a further twist of irony, maps of the town of Durban were handed out to us showing blacked-out *no-go areas*: Areas of the city considered too dangerous for

foreign delegates. This chapter explores some of the themes emerging in current research around themes of boundless nature and bounded political spaces and people. It explores how natural resources and transnational governance are global phenomena with uneven geographies, constructed in particular places by particular people and with effects in distant places. This chapter will review some of the key themes and scholarship on nature, politics, boundaries and the re-grounding of the nation-state. The aim throughout is not to be comprehensive but rather to give some idea of current debates.

Putting nature in its place(s)

The idea is widespread that the natural world and the political world are fundamentally divided along different lines and within different non-congruent entities. In some arenas, natural divisions (between ecosystems, biomes or continents) are presented as *more real* and more concrete than *artificial* political boundaries such as states; while in other contexts, on the contrary, political boundaries are presented as concrete and problematic while nature is presented as effectively boundless. I will start by examining the idea that nature contains de facto divisions. In this section, I will then move on to explore how this idea has been challenged and critiqued, while indicating its continued ubiquity in natural resource management.

In 1975, Miklos Udvardy, a Hungarian natural scientist, suggested that the Earth could be divided into eight bio-geographical realms. These were seen to be coherent natural spatial entities, different from the unnatural political divisions of the world. This was used to determine rationally what realms suffered from insufficient protection. This powerful idea was used by The World Conservation Union (IUCN) to 'classify continent or sub-continent-sized terrestrial areas according to unifying features of geography, fauna and flora' (Worboys and Winkler 2006, 18). More recent classifications such as the European Union's *bioregions*, The World Wide Fund for Nature's (WWF) *Global 200 hotspots*, or Conservation International's *biodiversity hotspots* are also designed similarly, at different scales.

The latter two international conservation organizations divide the world into places they consider needing urgent attention. WWF, for instance, seeks to target the loss of biodiversity strategically, extending Udvardy's classifications to oceans and freshwater systems. This has led to the listing of 867 *ecoregions*, or areas of what WWF calls outstanding biodiversity and representative communities, 'with boundaries that approximate the original extent of natural communities priori to major land-use change' (Olson 2001 in Worboys and Winkler 2006, 34). Conservation International, meanwhile, identifies its own 34 regions worldwide within which, it claims, 75 per cent of the world's most threatened species still live, within an area that covers just 2.3 per cent of the Earth's surface (Worboys and Winkler 2006, 37). Called *biodiversity hotspots*, these places are destined for priority focus, with success defined as extinctions avoided.

The fact that none of these classifications are the same, and that none identify the same so-called *natural boundaries*, indicates that these are social constructions, rather than natural divisions. As such, they reflect the particular world-view of these organizations, and are far from apolitical. The terms used are instructive: When Conservation International states that hotspots require *priority focus* this isn't just an organizational strategy, but rather a claim made on behalf of the world's population as a whole (Katz 1998).

There is of course a long history of scholarship on natural boundaries, critiquing the use of natural features such as rivers, mountains and other topographical features as the basis for the political boundaries of states or sub-state jurisdictions. Political geographers, in particular, have addressed this issue at length (Ancel 1938; Bodénès 1990; Brunet 1967; Foucher 1991; Gay 1995; Hubert 1993; Minghi 1963; Pounds 1951, 1954; Prescott 1978; Raffestin 1980, 1991; Ratzel 1897; Velasco-Graciet 1998), yet they are rarely referred to in conservation literature on natural divisions (Fall 2005). While I am not suggesting that all proponents of hotspots or bioregions imply that these are entirely neutral, there is a strong tendency within conservation literature to consider them apolitical or politically neutral. This has important consequences for assigning responsibility for conserving natural resources, as I will argue in the next section.

Geographical inquiry has traditionally taken as given the separation between nature and culture, and studied the influence of one on the other in both directions. Despite a rich history of engaging with nature and the environment, the social sciences have often failed to interrogate nature in itself (Bakker and Bridge 2006). Literature stemming broadly from so-called science studies (Haraway 1991; Latour 1991, 1997) has however provided the impetus and theoretical grounding for a rescripting of the divide between nature and culture (or society). In parallel to this, the emergence of social constructivism within the social sciences in the 1980s led to attention being given explicitly to the *social* dimensions of nature (Cronon 1983). Nature, in this line of thinking, was no longer simply natural, but rather intrinsically social since taking it *in itself*, non-social and unchanging, was taken to lead to the perpetuation of power and inequality in the wider world.

In a series of works by geographers (Braun 2002; Braun and Castree 1998; Castree 2005; Castree and Braun 2001; Demeritt 2001) an agenda emerged exploring the politicized construction of social natures (for recent reviews see Bakker and Bridge 2006; Castree and MacMillan 2004; Walker 2005). Diverse appeals to relations, actors, materiality and material encounters led geographers to explore and spatialize concepts such as hybridity, exploring the physicality and co-presence of the non-human, both animate and non-animate, within conventional human worlds (Fall 2005; Whatmore 2002; Zierhofer 2002; for a review see Braun 2005). In this line of thinking, suggesting that nature contains unproblematic material boundaries is impossible and counterproductive: Such divisions can only be thought of as constructions, as lines drawn politically, following a particular project. This does not mean that nature is only considered to be discourse: On the contrary, recent (re)engagements with the materiality of nature have led to a material engagement with nature as something that is always already unpredictable, vital, and always

shot through with multiple, transversal, non-linear relations (Clark 2000). These turbulent global natures, stretching across the globe in complex uneven ways, are assemblages made socially through networks of relations that remain inextricably vital and material. In arguing that global natures are always specific assemblages 'whose intricate geographies form tangled webs of different length, density and duration, and whose consequences are experienced differently in different places' (Braun 2006, 644), Braun dismisses all temptation of returning to the notion of nature as singular and universal. *Global nature*, in this context, is therefore an effect not a condition, and uneven rather than uniform, the consequence of specific connections and encounters that work across and through difference (Braun 2006).

Placing global nature?

Despite the innovative ways of thinking about nature within recent scholarship mentioned above, the prevalent Western practices follow the modern binary of nature and culture, seen as opposite ends of a spectrum or dichotomy. Nature has therefore often been assigned to particular *natural places* (Fall 2002), seen as removed from the places of society or urban life. Many so-called protected areas, such as national parks and nature reserve, have been designated in the past 140 years. These have been defined internationally as areas 'of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means' (IUCN 1994). They are a huge global success story: with over 106,926 protected areas in the world, covering an area of 19,617,833.60 square kilometres or 11.59 per cent of the surface of the Earth (UNEP-WCMC 2007). Yet this quantitative success is not unproblematic. It is almost as if these are considered the only places where nature is located, or at least where nature exists in a purer form. There remains a problematic distinction between the protected and the unprotected, as the preservation of certain places legitimates and mystifies the continued or even heightened destructive use of all that is outside the protected area's boundaries.

The World Conservation Union (IUCN), responsible worldwide for classifying categories of protected areas states that: 'The world's protected areas are the greatest legacy we can leave to future generations' (IUCN 2007). Not, for example, an intact environment in general, or clean water, or a stable climate. Protected areas are usually designed on the ground following a mixture of both biophysical criteria such as levels of high endemism or biodiversity, and socio-economic and political criteria such as low population density, political opportunism or aesthetic value. Because protected areas have been so successful in capturing the idea of nature, and seeming to reflect and embody it, the temptation to use these are privileged geographical objects to move *beyond (political) boundaries* has been immense. Yet rather than being a simple act of defining an area for conserving specific biodiversity, putting nature in one place, and society in another, designating a protected area is a profoundly political process, set within an inevitable web of power relations that is renegotiated or forcefully modified with all boundary changes.

In the next section, I explore how transboundary protected areas have been imbued with particular power to transcend political boundaries. At the same time, I will mention recent scholarship that indicates how difficult this has been in practice.

Transnational governance: transboundary protected areas

A wealth of articles has appeared on the subject of transboundary natural resource management in protected areas in the past 15 years, largely produced by international conservation organizations or non-specialist journals such as *National Geographic*. Protected areas in locations spanning international political boundaries have existed around the world since the 1950s, yet *transboundary protected areas* as such only became a global fashionable cause around the beginning of the 1990s (Fall 2005). This followed increased understanding about what constituted a critical mass or area in ecosystem health and therefore what was necessary for the maintenance of biodiversity. The importance of migration corridors, for example, was better understood in the light of emerging evidence of climate change and the crucial role of population size in sustaining genetic diversity became clearer as bio-molecular studies threw more light on genomes. In an increasingly competitive world of organizations vying for limited funding, transboundary planning became a leading paradigm for a multitude of actors. These new players recruited into the world of conservation and the promotion of peace and cooperation included international development agencies, United Nations agencies, transnational corporations and the tourism industry.

Building on this growing trend, the World Parks Congress held in South Africa in September 2003 was a key moment in the anchoring of this issue at a global level. Transboundary issues were one clearly visible theme, reflecting the fact that since 1990, the total number of transboundary protected areas doubled and many others were set to launch within the following few years. However, while this sounds impressive, it also reflects the fact that there existed no definition of what these might be, and contexts on the ground ranged from simple twinning agreements between two park authorities in neighbouring countries to more official and integrated management strategies. These spaces have often been called *Peace Parks* although the extent to which they foster or build upon existing peace is varied, and often unclear – or overblown.

> *Many places in the world where clusters of protected areas already exist are along international boundaries. … But nature does not recognize political boundaries. In many cases, ecosystems have been severed by arbitrarily drawn political boundaries, while species continue to migrate across those borders as they always have, oblivious to customs regulations.* (Zbicz 1999, 15)

In this quote, Zbicz draws heavily on the widespread image of nature as primitive, untouched, existing as a form of timeless Eden before being brutalized by human divisions. According to the social nature approach, this is not a pertinent distinction as all boundaries are intrinsically social. Such an idea of pure nature is problematic because it fails to recognize human interactions with nature over space and time, as well as nature as the result of an intrinsically political and societal construction. Yet this idea that international political borders sever nature is particularly pervasive.

The bulk of the critique of transboundary protected areas has come from Southern Africa and, to a lesser extent, South America and Europe (Duffy 2005, 2006, 2007; Fall 2005; Katerere et al. 2001; Ramuntsindela 2007; Wolmer 2003). These have focussed on issues of neoliberalism and the privatization of conservation and of the state, rescaling and globalization, changes in the role of the state in transnational governance, border identities and the difficulties of reconciling different cultural constructions of nature in border areas. Critiques have noted how, rather than requiring less state control of border zones, the creation of transboundary protected areas in developing countries paradoxically reinforces control and raises significant issues for the management or control of globalizing forces in weakly administered regions of the developing world (Duffy 2006). These transboundary projects, rather than simply being about conserving species, represent a 'kind of regulated globalization which aims to gain control over unmanaged and unregulated wild places sited around international borders' (Duffy 2006, 3). In fact, Duffy argues that in the contexts of Southern Africa and South America rather than requiring states to relinquish power in some sort of transnational space, such areas 'often assist in extending state power over areas that had been previously beyond the reach of law enforcement and other government agencies' (Duffy 2006, 4). They therefore conceal not a freeing of nature but rather a will to control, in which 'the previously dominant role of the state is supplemented and displaced by supranational bodies, non-governmental organizations and local community groups' (Duffy 2006, 10). In other words, it implies placing a particular marginal geographical space under the control of sub-state and supra-state bodies. These changes in governance trends and the corresponding simultaneous *rescaling* in governance practices upward to the supranational and downward to the local have been noted in a number of other arenas, such as transboundary water management (Norman and Bakker 2005).

Because transboundary protected areas captured the imagination of both conservation bodies and states, the web of support for transboundary work extends on an international level to a number of different players. Research and management guidance, including the publication of many guidelines and case studies, have been sponsored by organizations as diverse as the Biodiversity Support Program, the International Tropical Timber Organization, Conservation International, the German development agency Invent, in addition to the usual global players such as The World Conservation Union (IUCN), the United Nations Educational, Scientific and Cultural Organization (UNESCO), as well as non-governmental organizations such as Conservation International, The World Wide Fund for Nature (WWF), EUROPARC and the Peace Parks Foundation. This diversity of

partners, although the sign of an increase in interest also inevitably reflects a variety of different or conflicting perspectives and priorities. The International Tropical Timber Organization (ITTO) and the Peace Parks Foundation, for example, could be considered the organizational arms of commercial firms' intent on exploitation, via management plans, of the resources within these sites. The two examples in the next paragraph illustrate the paradoxes and contradictions these networks of diverse players can provoke.

During the 2003 World Parks Congress, a presentation by the Peace Parks Foundation of an aesthetically pleasing succession of images of wild Africa consisted wholly of animals trampling an Earth devoid of humans. Red sunsets and charismatic megafauna set the scene, branding the landscape as a product, accompanied by a soppy song in English. This was a landscape for Western and white consumers, not for local people. This was made all the more mordant by the fact that the Peace Parks Foundation, founded by Anton Rupert, a very wealthy South African tobacco magnate, had multiple business ventures in these areas, including in tourism (Wolmer 2003, 269). Another example illustrates the links between big business and conservation. A couple of years after the World Parks Congress conference, a very glossy coffee-table book titled *Transboundary Conservation: A New Vision for Protected Areas* (Mittermeier 2005) entirely funded by CEMEX, a global mining corporation, was produced by people linked to the Global Transboundary Protected Areas Network. This was published in collaboration with three non-governmental organizations, including Conservation International, an extremely wealthy and influential global non-governmental organization. In stark contrast to the declared policies of all these organizations in involving local populations, and as enshrined in international recommendations drafted during the previous World Parks Congress, the photos in this glossy book showed no people whatsoever, only charismatic fauna and fauna. In these two examples, it is *wild nature*, devoid of populations and presented as edenic and pure, that is constructed in sharp contrast to international political boundaries. But these are also spaces of boundlessness for global capital; spaces for the transnational circulation of investments, within which certain particular categories of people such as wealthy foreign tourists and investors are allowed to transcend political divisions.

This new balance of power between conservation and private interests is played out in concrete ways, beyond the simple financing of publications illustrated above. Encouraging partnerships between governments, the private sector and civil society in sustainable development and natural resource management was one of the major and most controversial themes of the World Summit on Sustainable Development held in Johannesburg in South Africa in 2002. This global recommendation is that public/private networks provide goods and services should operate in what were once the preserve of state controlled public sectors. This idea of public/private partnerships has a long established history in other areas of international environmental policy, such as forestry. It has therefore been argued that these ventures are more about opening up spaces for capital to make a profit from the conservation industry than they are about effective conservation policies.

Wolmer (2003), for instance, has written that one tension inherent in the governance of transboundary protected areas is the curious intersection of ecological and scientific discourses with discourses of global governance that emphasize the extension of neoliberal economic management. He notes that, in Africa, these are sold as the African dream-ticket combination of economic growth and environmental conservation and as a means of restoring investor confidence in the continent. With massive funds necessary for large-scale ecoregional planning initiatives, large conservation organizations are becoming increasingly business-like, developing funding strategies in conjunction with multilateral development banks and building corporate linkages. These funding structures as well as the managerial tools these large-scale and top-down initiatives inevitably privilege *big conservation*, such as transnational conservation organizations, at the expense of grassroots or even national conservation organizations. Thus the private sector and international financial institutions have found common cause with global environmental organizations, with donor-recipient governments forced to adapt. This new melting of conservation and commercial goals throws up certain problems: Conservation and business do not necessarily pull in the same direction and when they do it can be to the detriment of stakeholders other than investors, particularly local communities.

The examples above suggest different answers about what nature is, whom it is for, and who benefits from its protection. Transboundary initiatives, well-funded by international conservation organizations and transnational corporations, promote a global idea of nature as something to be managed and defined globally. Yet these rely on an understanding of nature defined by the most powerful actors in each context, leading to a weakening of the nation-state as the most pertinent scale for environmental management. However, at the same time, research in Europe has shown that rather than weaken the state as a scale of identity politics, and create shared boundless understanding centred on nature, such projects paradoxically reinscribe the scale of the nation-state (Fall 2005). Nature, in these cases, is used as a further means of *othering* neighbours, of reinscribing differences presented as irreconcilable.

Embodying global natures?

In many transboundary spaces, a host of opposing and conflicting dominant stories coexist within administrations and organizations involved, created discursively along the way by individuals as part of the dynamic process of negotiating personal and collective identities. These are often tales – or myths – of animals crossing the border and getting shot, being poached or stolen, or are about mismanagement and bad policy choices, often associating the neighbouring country's policies with retrograde, unscientific practices. Dynamic relations between integration and distinction permeate such spaces. Individuals and groups such as park rangers and scientists construct nature, and speak about plants, animals or landscapes as somehow imbued with diverse national characteristics, irreconcilably different.

In the Alpi Marittime (Italy) / Mercantour (France) transboundary protected area, a story was told repeatedly about the lammergeyers – a type of vulture – being progressively reintroduced in the mountains. One bird was released each year, in alternate countries (Fall 2005). The birds were given either a French or an Italian name, depending on the country where they were released. French managers repeatedly noted that even the French birds inevitably went to live in Italy. Although this was always told tongue-in-cheek, the recurrence of the tale indicated its symbolic strength. The different versions hinted either at the nature-knows-no-boundaries myth (the birds ignore political designations) or else, more tellingly, as boundaries-reflect-fundamentally-different-natural-conditions (boundaries are natural). For the French managers, this implied that the neighbours had in practice stolen the French birds; for the Italians this meant that the birds preferred to live in Italy because of essential differences, because nature was more natural there. Birds, bears and beetles were not the only animals used as icons of difference. In the same area, the wolf was returning, moving into France from parks on the Italian side. Again, this iconic animal served to highlight differences in the way nature was constructed. Again, the animals were symbolically attributed a nationality: 'It's difficult when there are prickly subjects such as the wolf that we have in the parks, because this isn't an easy subject and so is really quite polemical. And in addition the wolves came from Italy, so it's not easy' (Interview in fall 2005 with Chloé from the Parc National du Mercantour, France).

Thus not only were the wolves a problem in themselves, but they were additionally problematic because they were associated with *the other side*: This comment referred to the difficulty in convincing French shepherds that the wolves were natural and were not part of a *foreign* invasion. The usual accusation heard in offhand comments and debated in the local press was that ecologists had covertly released the wolves, threatening the local practice of keeping sheep in unguarded flocks on the high pastures. The idea that the wolves had been reintroduced, like the lammergeyers, was pervasive among shepherds and local politicians eager for their votes. One local mayor referred to the threat the wolf posed to the 'indigenous fauna' [*faune indigène*],[1] a populist appeal to biophysical imagery serving political ends. The wolves, not only unnatural but also foreign, were presented as having no place in the French mountains. This tale served to denaturalize them, making them legitimate targets for destruction in an area were hunting was prohibited. In this case, there was a clear recognition by one manager that while actual conditions differed, representations of nature were culturally-contingent and based on collective myths:

> *On the Italian side they don't have the same problem at all in as far as they have many less flocks [of sheep] and also they have in their culture a cult of the wolf, Remus and Romulus, so it's the female wolf who raised Remus*

1 Comment noted during the expert seminar in Entracque (Italy) and Menton (France) entitled 'Un parc européen pour le 21ème siècle [Un parco europeo per il 21° secolo]', on 14-15 October 1999.

> *and Romulus, it's a different culture, we have Little Red Riding Hood, it's not exactly the same!* (Interview in fall 2005 with Chloé from the Parc National du Mercantour, France)

On the ground, individuals struggled with the various notions, tempted by images of science-based boundlessness and yet distracted by the difficulties of implementing common policies. The performances of the animals were presented as self-evident, sufficient arguments for upholding a specific myth of boundless nature. After all, the argument went, how could you contest something that exists in the flesh? This intrinsic corporeality of animals as figures of embodied otherness gained further performative value when, in a different administration, animal nicknames were applied systematically to individuals they were trying to work with across the border. One German protected area manager was for example referred to as *le Blaireau* [the badger], a highly abusive term when used in this way in French, allegedly because of his pet dachshund (*Dachs* in German means badger) but more simply as a plain insult. Even if animal names are 'often harmlessly applied to individuals and typically invoked in jest' (Anderson 2000, 310), quite creatively in this case, the 'essential animality on which such superficial allusions rely reveal the potential for more significant boundary efforts. … Discourses about animality have regularly found their way into institutional life and collective efforts at exclusion, the interrogation of which clarifies [how] they relate to European racist formations' (Anderson 2000, 310). The essential otherness of the other was reinforced by referring to innate bestiality, placing people as doubly *Other*: Beyond the bounds of humanity and beyond the (naturalized) political boundary.

In the following section, I will explore another example of this process of negation of the political in matters of nature around the issue of mobile and invasive species. Discourses of mobility, invasion and identity are further projected on to plants and animals, rehearsing in different ways issues of identity, boundaries and nature.

Transgressing political boundaries: mobile natures

In a context of accelerated world travel and increased global trade, the policing of living matter and the focus on good and bad circulations across national boundaries are part and parcel of globalization. This raises another aspect of transnational governance of natural resources: the increase in attention given within the conservation community to non-native species. Terms such as invasive, exotic, non-native, non-indigenous and alien are used to describe a *global swarming* of plants and animals, a term creatively coined with reference to climate change (Wittenberg 2005). These are seen as out-of-place and out-of-control species, far beyond their native habitats. This global problem is increasingly framed as a problem of security: the survival of native species versus the swarming success of new arrivals, of uninvited guests. These tales of swarming, invading, foreign, and out-of-control natures, with concurrent stories of a global homogenization of

biodiversity that reduces local diversity and distinctiveness – the McDonaldization of nature (Wittenberg 2005) – is another arena where discourses of boundless nature and bounded states are rehearsed.

Governments have expressed their concern about this within the Convention on Biological Diversity (CBD), which calls on the Parties to 'prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species' (CBD, Article 8h). A number of factors mean that people are both intentionally and inadvertently introducing so-called alien species that may become invasive: increasing globalization of the economy; people directly designing the kinds of ecosystems they find productive or congenial, for instance when they emigrate, incorporating species from other parts of the world; growing travel and trade coupled with weakening customs and quarantine controls. This can reduce biodiversity by crowding out a particular habitat since the new arrivals do not encounter natural predators or are able to colonize particular ecological niches crowding out other species.

The image of global swarming conjures up an idea of an out-of-place vital nature that continuously challenges political boundaries, and echoes Cresswell's (1996) notion of people and things being constructed as *out of place* through a variety of rhetorical processes. These global natures challenge the old European medieval idea of nature, viewed as a single entity in which each creature had its own place reflecting the divine and perfect order (Macnaghten and Urry 2000). Instead, species moving around the world in an uncontrolled manner challenge attempts to fix and assign nature to particular places, such as protected areas. This 'grunting, lowing, neighing, crowing, chirping, snarling, buzzing, self-replicating and world-altering avalanche' (Crosby 1986, 194) has been written about predominantly by authors focussing on former European colonies (Clark 2002; Crosby 1986; O'Brien 2006). This dynamism and boundary-defying characteristics 'suggest that nature has come in from the margins and may well be wreaking its cosmopolitan revenge upon human agents. Such humans are not the only species to move rapidly, indeterminately, chaotically and "naturally" from place to place' (Clark quoted in Macnaghten and Urry 2000, 9).

In this context, animals and even plants are scripted as dynamic, crossing boundaries, setting forth outside the spaces set aside for them, and beyond the spaces they were thought to belong to. *Global Black Lists* and *Watch lists* of plants, animals, fungi and invertebrates are produced by international bodies such as The World Conservation Union (IUCN) within the Invasive Species Specialist Group, or the Global Invasive Species Programme of the Convention on Biological Diversity, selecting what are seen as the worst offenders across the entire globe. At national levels, government bodies and concerned groups of scientists are also busy producing lists of species, each stemming from rehearsed fears of the rapid ecological collapse of local native species as new arrivals take over. In Switzerland, for example, the Swiss Commission for Wild Plant Conservation lists some of the following plants as the worst offenders: Canadian Pondweed, Himalayan Balsam, Japanese Honeysuckle, Himalayan Knotweed, Japanese Knotweed, Sakhalin Knotweed, Armenian Blackberry, South African Ragwort, Canadian Goldenrod,

Indian Pokeweed, Caucasian Stonecrop, Oxford Ragwort or even Chinese Windmill Palm.

How can a plant suddenly become *foreign*? Categories such as wild, native or alien, for instance, transport values beyond the intent of any individual or group of speakers, using the well-rehearsed *foreigner-as-threat* language that finds its way into conservation discussions, mainly by playing on feelings of insecurity. There is a naming convention in biology that serves to distinguish one particular species from another, but these common names are different from Latin names that have codified conventions for species and sub-species. Reading lists of common names of invasive species, it is impossible not to be struck by how out-of-place many of them are presented as being. They read like lists of people, like histories of human migration, as much as of plants – things that are usually seen to be static, not on the move. These names and assigned nationalities indicate that they have crossed international political boundaries, and are considered to be on the wrong side.

The underlying assumptions redraw and reinforce what is defined as natural and what isn't by simultaneously making different species appear more or less part of nature: Plants and animals are assigned native ranges and nationalities; plants are implicitly assigned a political and quasi-military plan of invasion; and nations need securing and protecting. One author has suggested that 'the "invasion" metaphor … is the most popular means of suggesting the potential for catastrophic damage resulting from the uncontrolled influx of exotics, and evokes a sense of insecurity that helps motivate action from an otherwise distracted public' (O'Brien 2006, 69).

While the antagonism against exotics need not be xenophobic and can be justified as a means of preserving the diversity of ecological systems from the homogenizing forces of globalization (O'Brien 2006, 73), it is important to understand that the science underpinning it is in itself contested, or at least more complicated than simple tales of swarming imply. Change is inextricably bound up with the dynamics of nature. Given the fact of past climate change and evolutionary responses to it by migration, as well as genome changes through mutation and natural selection, the whole idea of *native* species and invasion is absurd on a biological level. Yet many still fall into this trap. In a context of climate change, many biologists are arguing that the whole idea of invasive species should be abandoned. Many species will not be able to make the rapid adjustment that is needed if they are to survive changes in their ecosystem as conditions change. Given this, if a species migrates, then it may increase its chances of survival.

In this example, questions of biology are subtly shifted into other explicitly political arenas, subtly re-grounding the nation state as a natural, rational and therefore depoliticized geographical entity.

Conclusions

This chapter has meandered through the wide and exciting literature dealing with transboundary issues, boundaries, and the naturalization of politics. Key themes and debates about the changing role of borders and the rescaling of the state have been briefly evoked in parallel and in dialogue with the literature on transboundary protected areas and mobile, boundary-crossing species. Throughout, I have sought to illustrate how global natures and natural resources are made and performed in a variety of arenas and are not just things that require management. The issue therefore is not that political boundaries are a hindrance to rational scientific management, or that political boundaries are anti-nature or unnatural. Instead, by reintroducing the political into every step of the analysis, I have attempted to work beyond apparent binaries of nature versus society or culture – nature versus political boundaries – to suggest future fertile paths for research.

References

Ancel, J. (1938), *Géographie des Frontières* (Paris: Gallimard).

Anderson, K. (2001), 'The nature of race', in Castree, N. and Braun, B. (eds.), *Social Nature: theory, practice, and politics* (Oxford: Blackwell), 64-83.

Bakker, K. and Bridge, G. (2006), 'Material worlds? Resource geographies and the "matter of nature"', *Progress in Human Geography* 30:1, 5-27.

Bodénès, S. (1990), *Théorie limologique et identités frontalières: le cas franco-genevois*, PhD thesis (Genève: Université de Genève).

Braun, B. (2006), 'Environmental issues: global natures in the space of assemblage', *Progress in Human Geography* 30:5, 644-54.

Braun, B. (2005), 'Writing geographies of hope', *Antipode* 37:4, 834-41.

Braun, B. (2002), *The Intemperate Rainforest: Nature, Culture and Power on Canada's West Coast* (Minneapolis: University of Minnesota Press).

Braun, B. and Castree, N. (1998), *Remaking Reality: Nature at the millenium* (London: Routledge).

Brunet, R. (1967), *Les phénomènes de discontinuités en géographie* (Paris: CNRS).

Castree, N. (2005), *Nature* (London and New York: Routledge).

Castree, N. (2001), 'Socializing nature: theory, practice and politics', in Castree, N. and Braun, B. (eds.), *Social Nature: theory, practice, and politics* (Oxford: Blackwell), 1-21.

Castree, N. and MacMillan, T. (2004), 'Old news: representation and academic novelty', *Environment and Planning* 36:3, 469-80.

Castree, N. and Braun, B. (eds.)(2001), *Social Nature: theory, practice, and politics* (Oxford: Blackwell).

Clark, N. (2000), 'Botanizing on the asphalt? The complex life of cosmopolitan bodies', *Body & Society* 6:12, 12-33.

Coates, P. (2007), *American Perceptions of Immigrant and Invasive Species: Strangers on the Land* (Berkeley: University of California Press).
Cresswell, T. (1996), *In Place/Out of Place: Geography, Ideology and Transgression* (Minneapolis: University of Minnesota Press).
Cronon, W. (1995), *Uncommon Ground: Rethinking the Human Place in Nature* (New York: Norton).
Crosby, A. (1986), *Ecological Imperialism* (Cambridge: Cambridge University Press).
Demeritt, D. (2001), 'Being Constructive about Nature', in Castree, N. and Braun, B. (eds.), *Social Nature: theory, practice, and politics* (Oxford: Blackwell), 22-40.
Duffy, R. (2007), *Peace Parks*, unpublished.
Duffy, R. (2006), 'Global governance and environmental management: The politics of transfrontier conservation areas in Southern Africa', *Political Geography* 25:1, 89-112.
Duffy, R. (2005), 'The politics of global environmental governance: The powers and limitations of transfrontier conservation areas in Central America', *Review of International Studies* 31:1, 307-23.
Fall, J.J. (2005), *Drawing the Line: Nature, Hybridity, and Politics in Transboundary Spaces* (Aldershot: Ashgate).
Fall, J.J. (2002), 'Divide and rule: constructing human boundaries in "boundless nature"', *GeoJournal* 58:4, 243-51.
Foucher, M. (1991), *Fronts et Frontières: Un Tour du Monde Géopolitique* (Paris: Fayard).
Gay, J.-C. (1995), *Les Discontinuités spatiales* (Paris: Economica).
Haraway, D. (1991), *Simians, Cyborgs, and Women: The Reinvention of Nature* (London: Free Association Books).
Holdgate, M. (1999), *The Green Web* (London: Earthscan).
Hubert, J.-P. (1993), *La Discontinuité critique: Essai sur les principes a priori de la géographie humaine* (Paris: Publications de la Sorbonne).
IUCN (2007), *IUCN Protected Areas Programme* (Gland: World Commission on Protected Areas).
IUCN (1994), *Guidelines for Protected Area Management Categories* (Gland: IUCN).
Katerere, Y., Hill, R. and Moyo, S. (2001), 'A Critique of Transboundary Natural Resource Management in Southern Africa', IUCN-ROSA *Series on Transboundary Natural Resource Management* 1 (Southern Africa: IUCN).
Latour, B. (1997), *Nous n'avons jamais été modernes: Essai d'anthropologie symétrique* (Paris: La Découverte).
Macnaghten, P. and Urry, J. (2000), 'Bodies of nature: Introduction', *Body & Society* 6:1, 1-11.
Minghi, J.V. (1963), 'Boundary studies in political geography', *Annals of the Association of American Geographers* 53:3, 407-28.
Mittermeier, R.A., Kormos, C.F., Mittermeier, C.G., Gil, P.R., Sandwith, T. and Besançon, C. (eds.)(2005), *Transboundary conservation: a new vision for Protected Areas* (Mexico: CEMEX).
Norman, E. and Bakker, K. (2005), 'Drivers and Barriers of Cooperation in Transboundary Water Governance: A Case Study of Western Canada and the

United States', *Report to the Walter and Duncan Gordon Foundation* (Toronto: The Walter and Duncan Gordon Foundation).
O'Brien, W. (2006), 'Exotic invasions, nativism, and ecological restoration: on the persistence of a contentious debate', *Ethics, Place and Environment* 9:1, 63-77.
Pounds, N.J.G. (1954), 'France and "les limites naturelles" from the Seventeenth to the Twentieth Centuries', *Annals of the Association of American Geographers* 44:1, 51-62.
Pounds, N.J.G. (1951), 'The origin of the idea of natural frontiers in France', *Annals of the Association of American Geographers* 41:2, 146-57.
Prescott, J.R.V. (1978), *Boundaries and Frontiers* (London: Croom Helm).
Raffestin, C. (1991), *Géopolitique et histoire* (Lausanne: Payot).
Raffestin, C. (1980), *Pour une géographie du pouvoir* (Paris: Litec).
Ratzel, F. (1897, translated 1988), *Politische Geographie* (Paris: Economica).
UNEP-WCMC (2007), *World Database on Protected Areas* (United Nations Environmental Programme and World Conservation Monitoring Centre), available at <http://www.unep-wcmc.org/wdpa/>, accessed 2 May 2007.
Velasco-Graciet, H. (1998), *La frontière, le territoire et le lieu: Norme et transgression dans les Pyrénées occidentales*, PhD Thesis (Pau: Université de Pau et des Pays de l'Adour).
Walker, P.A. (2005), 'Political ecology: where is the ecology?', *Progress in Human Geography* 29:1, 73-82.
Whatmore, S. (2002), *Hybrid Geographies: Natures Cultures Spaces* (London: Sage Publications).
Wittenberg, R. (ed.)(2005), 'An Inventory of alien species and their threat to biodiversity and economy in Switzerland', *CABI Bioscience Switzerland Centre report* (Switzerland: CABI).
Wolmer, W. (2003), 'Transboundary conservation: The politics of ecological integrity in the Great Limpopo Transfrontier Park', *Journal of Southern African Studies* 29:1, 261-78.
Worboys, G. and Winkler, C. (2006), 'Natural Heritage', in Lockwood, M., Worboys, G.L. and Kothari, A. (eds.), *Managing Protected Areas: A Global Guide* (London: Earthscan).
Zbicz, D.C. (1999), *Transboundary Cooperation in Conservation: A Global Survey of Factors Influencing Cooperation between Internationally Adjoining Protected Areas* (Durham: Duke University).
Zierhofer, W. (2002), *Gesellschaft: Transformation eines Problems* (Oldenburg: BIS).