

Divide and rule: Constructing human boundaries in 'boundless nature'

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Key words: boundary, bioregion, conservation, protected area, social construction of nature, wilderness

Abstract

Rather than creating unproblematic 'natural' spaces, the definition of boundaries within protected areas formally reifies the modernist duality of nature and culture, leading to practical management conflicts between protected area managers. The current conception of protected area boundaries is the result of the historical construction of nature and space. The argument retraces the changes in the way these boundaries appeared and were subsequently defined in four consecutive 'World Congress on National Parks'. The corresponding changes in the definition of insider and outsider are discussed, linked to the conception of what is 'natural' in the landscape. Such conceptions need to be examined critically, particularly if the expressed desire of transcending the modernist divide is to be realised in the future.

Boundary, n. In political geography, an imaginary line between two nations, separating the imaginary rights of one from the imaginary rights of the other. ("The Devil's Dictionary", Ambrose Bierce, 1911)

Constructing boundaries

'Natural boundaries' have all but disappeared in political spheres, supposedly vanishing after having enjoyed tremendous success in 18th century Revolutionary France and 19th century Germany. Yet, as a Phoenix reborn, the idea is currently enjoying a surprising revival among environmental activists and international conservation organisations. This is linked to the debate on appropriate locations and shapes of protected areas, understood as areas set aside to conserve nature by limiting human impact. In extreme cases, this resurgence of natural boundaries is leading to calls for the redefinition of political boundaries along natural features within 'bioregions' or 'ecoregions'. These are taken to be the inevitable offspring of large-scale protected areas and national parks (Fall, 2003, p. 81) Such politically suspect arguments of biophysical determinism are a new twist in an old tale and require setting in a historical context, lest such protected areas be reified and space fetishised without question around the idea of a crude separation between the natural and non-natural.

This return to naturalistic arguments is in stark contrast to the fashionable 'reinvention' of nature within academic debate and the heralded end of the founding modernist dualisms that have led to a critical reappraisal of the relationship between humans and their environment. For if it is suggested that society and nature co-construct each other, then the founding principle is that 'nature' does not pre-exist as such, but rather is the result of a conceptual boundary being defined, creating an Inside and an Outside. While this can be understood on a purely theoretical level, as in the boundary between humans and non-humans, it can also be examined in a very concrete way. This article discusses a concrete example of boundary definition by critically examining protected area boundaries and the changes they have undergone since such spatial entities first appeared.

In this paper, I consider spatial entities – protected areas – to be divergent territorial ideologies that are constructed by various actors and contribute to the construction of space. This partly stems from Paasi's discussion of the role of academic disciplines in the construction of space (Paasi, 1996, p. 19). In this, he draws much inspiration from Lefebvre's discussion of the production of space, who traced various forms of spatial practice which 'put life' into abstractions (Lefebvre, 1991, orig. 1974 in Paasi, 1996, p. 18). Although Lefebvre, and to a certain extent Paasi, are dealing almost exclusively with state boundaries, I argue that this analysis of territorial ideologies can be stretched to cover other forms of spatial entities.

The boundaries to protected areas are not taken for granted. Since they are more than simple lines of division between different spaces, the resulting entities remain conceptually problematic. Rather than creating unproblematic 'natural' spaces, the definition of boundaries in the landscape formally reifies the modernist duality of nature and culture, leading to practical management issues of conflict between a variety of actors. This remaining duality affects protected area managers by entrenching misunderstandings between natural scientists working for 'nature conservation' and social scientists seeking 'sustainable development' within a shared area, even in cases where it is internally

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divided into a series of zones with differing management objectives. The underlying ideologies are thus upheld in connection with the creation of protected areas, which are defined as coherent spatial entities according to a combination of biophysical and societal arguments. There is therefore a struggle to put forward legitimate definitions for such spatial entities carried out by people and organisations involved in designing such areas. In line with Paasi (1996), I argue that the definition of these entities sheds light on the social construction of spatiality or *social* spatialization, laying emphasis on the role of rhetoric in this process, referring to the forms of persuasive argument put forward by a variety of actors.

By reviewing and emphasising the variety of arguments used to justify the definition of protected areas, the analysis points to the variety of meanings assigned to boundaries. The continuing tension between biophysical and societal arguments throughout the history of the protected area movement is far from resolved, despite proclaimed joined-upthinking and new spatial planning models. The emergence of protected areas is mentioned, followed by an analysis of the rhetoric constructed within international gatherings of protected area managers and international conservation organisations, dwelling particularly on the reports of the four World Congresses on National Parks held from 1962 to 1992. I examine the changes in the way boundaries to such areas have been considered. Although this is presented as a chronological sequence, it does not mean that many of these different conceptions of boundaries do not continue to coexist in various forms, often in close proximity and at the same time. This choice of analytical slant serves to emphasise the frequently paradoxical nature of the boundaries and the situations in which "managers of protected areas face the difficult challenge of maintaining boundaries, or certain aspects of boundaries, that protect and sustain these areas, while working to erase or diminish the negative effects of these same boundaries" (Landres et al., 1998, p. 134).

Sacred groves and landscapes

The idea of protecting an area from human impact has existed around the world in different forms for centuries, before European and North American people decided to legally define areas, and designate them protected. All around the world people dependant on natural resources managed their local environments in various more or less sustainable ways. Gadgil writes that many small-scale societies exhibit "a number of practices of restraint in the use of biological resources that promote conservation of biodiversity" (Gadgil, 1996, p. 349). He lists a number of practices in various populations around the world that indicate a respect for certain species or habitats. Such societies "regulate habitat transformation by protecting samples of natural communities on sacred sites (e.g., sacred groves, sacred ponds)" (Gadgil, 1996, p. 349, see also Craven, 1993, p. 23). Thus people living within a given space shape the landscape through their daily activities by selecting specific zones for precise purposes.

An example will suffice to give some idea of how the notion of protected area is linked to notions of communal land. One Melanesian community physically demarcates its land and can precisely point out the boundaries to it: 'These boundaries are marked by stones hidden by their ancestors, by totem trees planted several generations previously, and by the villagers' legends of the dispersal of their people following the emergence of the first couple from the rocks of the volcano peaks, an event misted over by distance in time and mythology' (Lees, 1993, p. 69). The whole of the land is deemed sacred, containing its people's sacred inheritance of resources such as timber, animals, plants and soil. Yet specific sites are additionally set aside within it for a particular purpose.

Traditional societies must not systematically be mistaken for an idyllic Garden of Eden, with 'primitive' humans living in symbiosis with nature. Cordell warns against the perils of such romanticism: "Indigenous societies probably were and are neither significantly better nor worse than European societies at preserving their environments" (Cordell, 1993, p. 68). The remaining land tenure systems still filled with traditional knowledge and inherent ideas of protection are not the panacea for modern conservation, although naturally much can be learnt from them. Writing about Australia, Cordell argues that "the traditional tenure systems at issue here, which have come down through the ages, are not panaceas for environmental degradation; they are not formulas for maintaining communities in some ideal state of isolation and equilibrium with their lands." (Cordell, 1993, p. 68). Growth and movement of population are major factors in bringing about change in traditional practices, as are economic and social changes. Traditional philosophies on how to care for the land and create de facto protected areas might not be directly applicable today, although these are undoubtedly influencing contemporary protected area policy. Certainly, the idea that there exists an original state of grace in which nature and culture were undistinguished remains conceptually potent.

Hunting preserves for the rich and royal

Historically, the idea of sacred groves protected by and for the benefit of local communities existed in parallel to other systems of land management in which certain benefits were reserved for specific elites. In Europe, rather than only having communal forests, large land owners or monarchs decided to reserve portions of their lands for recreation in the form of hunting or rivers for fishing. Harroy notes that "at the most, hunting had, in certain cases, made game animals so scarce that certain monarchs or powerful aristocrats established their own personal hunting reserves which were strictly guarded against poaching. In doing so, these great land owners were in some cases unconsciously preparing the beginnings of subsequent natural reserves such as Fontainebleau, Rambouillet, the Royal Forests of Great Britain, or even the hunting grounds of the dukes of Savoy, now Gran Paradiso National Park." (Harroy, 1974, p. 25, see also Gadgil, 1996, p. 354).

Such protected lands were for those who could afford time for recreation, preserving privileges in specially designated lands. Such a system presupposed the possibility of enforcing legal protection of the area to prevent poaching, as well as a specific workforce employed to protect such privileges. Insiders and Outsiders were defined by social class and belonging, not - as was subsequently the case - by their relative 'naturalness'. Ironically such an elitist system often directly preserved unique ecosystems, subsequently designated 'national' parks or other types of protected areas symbolically for all people. In a curious twist of history, some of these areas were subsequently used as hunting grounds for political elites under subsequent regimes in Europe...

The first national parks

The idea of wilderness was crucial to understanding the birth of the national park movement in the 19th Century, representing wild pristine nature, untouched by human hands, and of essence separate from human society. "The presumption was that the wilderness was out there, somewhere in the Western heart of America, awaiting discovery, and that it would be the antidote for the poisons of industrial society" (Schama, 1995, p. 7). Such a notion implied the existence of its opposite, that is to say nature exploited, transformed by human action, and having thereby lost some of its original characteristics. This dichotomy implied considering whether there needed to be a boundary between pristine wilderness and modified, humanised stretches of land, or whether such a notion was unnecessary, or unhelpful. The American naturalist John Muir was a fervent proponent and defender of the idea of wilderness, rejecting the idea of an imposed boundary, preferring to see nature as an infinite, boundless entity. As such, the idea of protected areas contradicted his idealised vision of nature as ungraspable or unlimited and consequently boundless. Confining it spatially in a reserve was therefore morally wrong.

The creation in 1864 of a protected area in Yosemite "as a sacred significance for the nation" (Schama, 1995, p. 7) however marked the birth of the idea of protected areas, established with the objective of "the preservation of scenic beauty and the protection of natural wonders so that they could be enjoyed by people" (Hales, 1989, p. 139). In 1872, Yellowstone became the first official 'national park', followed by Yosemite in 1890. Boundless nature and pragmatic protection were thus combined. The creation of Yosemite as 'a democratic terrestrial paradise' (Schama, 1995, p. 7) enshrined the idea of the necessity of encircling nature by creating a legally established boundary. This was not only to protect it from outside depredations but rather to keep it untouched yet available for human contemplation.

The boundary defined an area of aesthetically pleasing landscape available for human enjoyment, setting aside land in the form of a 'vignette of primitive America' (Hales, 1989, p. 139). Park boundaries were therefore taken to be 'walls against which profane activities would founder, providing within sanctuary to the human spirit' (Hales, 1989, p. 140), delimiting an area for enjoyment and inspiration, designed for people, not nature. The means for doing so was 'to draw a boundary around the elements that were enjoyable or inspirational and preserve them unchanged' (Hales, 1989, p. 140). Schama Such bounded sites encompassed religious as well as aesthetic ideals: "like all gardens, Yosemite presupposed barriers against the beastly. But its

and the humans out" (Schama, 1995, p. 7). The idea of protected areas spread around the globe, often ironically linked to 'modernising' values imposed on colonised land. As part of this spread, 'World Congresses on National Parks' were staged every ten years. They provided a platform in which diverse positions could be debated, building a form of consensus within what increasingly came to be seen as a worldwide 'movement'.

protectors reversed conventions by keeping the animals in

The First World Congress on National Parks

The First World Congreaa on National Parks in 1962 marked the beginning of a worldwide awareness of the role protected areas played with the ambition of establishing "more effective international understanding and to encourage the national park movement on a worldwide basis" (Adams, 1964, p. xxxii), bringing together delegates from 63 different countries. The first World Conference stood at a crossroads between two conflicting views of what protected areas should be, referred to exclusively in this context as 'national parks'. The first suggested that they should be wilderness areas predominantly designated in view of their aesthetic value and for contemplation by human beings, the second that they should exist to protect what was then called 'fauna and flora'.

Illustrating the idea that protected areas are islands of wilderness in a sea of altered landscape, Stewart Udall, then US Secretary of the Interior, said in his keynote address that "with few exceptions the places of superior scenic beauty, the unspoiled landscapes, the spacious refuges for wildlife, the nature parks and nature reserves of significant size and grandeur that our generation saves will be all that is preserved. We are the architects who must design the remaining temples; those who follow will have the mundane tasks of management and housekeeping" (Udall, 1964, p. 3). 'Parks' were both areas for experiencing the sublime, and instruments for preserving it. Using the familiar metaphor of Noah's Ark, he likened park managers to 'the Noahs of the 20th Century' (Udall, 1964, p. 7), locking up nature in specific places in order to carry it intact into the next century. Romantic and biblical language likened the destruction of nature to the rape of a pure creation. Parks were for people's enjoyment of nature, 'created by the people for the use of the people' (Wirth, 1964, p. 20) either in the romantic pristine wilderness experience, or in the more pragmatic American parkways 'which are elongated parks with studiously landscaped highways, designed for the pleasures of scenic travel' (Wirth, 1964, p. 15). Parks were places where there were 'opportunities for contemplation and regaining the almost forgotten sense of timelessness the world once knew' (Olson, 1964, p. 48), featuring the Eden-like and virginal quality of an untouched wilderness. This aesthetic approach was contrasted by a more pragmatic 'scientific' position. Chasing wilderness was a chimera: "in very few areas can we still refer to unspoiled nature and sound ecological units. Natural preserves have been interfered with to such an extent that balanced ecological units are very rare" (Knobel, 1964, p. 165). A protected area, far from being only sublime scenery was 'an area set aside for the protection, propagation, and the preservation of wild animal life and wild vegetation and for the preservation of objects of aesthetic, geologic, prehistoric, archeologic, or other scientific interest for the benefit, advantage, and enjoyment of mankind' (Knobel, 1964, p. 160). In other words, it was an area of land not only for human contemplation, but also for the preservation of nature itself, fundamentally distinct from human existence.

Protected area boundaries

The introduction to the conference proceedings noted that 'the problem of conserving nature is not a local matter, because nature does not respect boundaries. The birds winging their way southward over Europe neither know, nor care, whether they are passing above a Common Market or a group of feudal duchies. (...) Nature takes no heed of political or social agreements, particularly those that seek to divide the world into compartments. It has been – and always will be – all-inclusive' (Adams, 1964, p. xxxi). Despite such a pronouncement, nobody present at the Congress questioned the notion that protected areas were necessary, or desirable, and therefore that it was useful to define an area in order to protect it by means of an outside boundary.

The actual planning of the areas designated as protected also underwent a change at this time. The one unique exterior boundary keeping humans out yet allowing them in to enjoy the site was reviewed. For although 'it sounds relatively easy to make laws prohibiting people to enter certain areas, to build strong fences or walls around such areas, to refuse to build roads to, and in, such areas and virtually to provide complete protection against man' (Knobel, 1964, p. 160), in reality it was not.

It was clear that humans were understood to live on the exterior, looking in across the boundary. They could travel through the area, but not stay for long. The idea that human populations could inhabit these parks was anathema to the basic idea of pristine wilderness. The terms used to describe these entities were in themselves revealing, including words like 'reserve' and 'sanctuary', indicating that humans were kept out yet selectively allowed in to contemplate the land. Hales noted that while the accepted principle was that 'parks are for people', "carefully excluded from the notion of 'people' are those who would make 'nonpark' use of the resources, those not oriented to the enjoyment of the values for which the unit was set aside" (Hales, 1989, p. 140). It was therefore accepted that 'permanent human settlements within the sanctuaries and reserves should not be permitted. Even existing settlers, if any, should be evacuated. Alternative sites outside the parks and reserves could be found for their occupation. Experience has shown that some settlers have been extremely unscrupulous, and their presence in the sanctuaries has been fraught with danger to wildlife' (Badshah, 1964, p. 28). A national park was a sanctum sanctorum, 'inviolate, as it often represents the last remnant of the original stand of the country' (Badshah, 1964, p. 30, see also Wirth, 1964, p. 16). The ultimate aim was to keep hostile humans out while the wilderness remained pristine for contemplation by those who could really appreciate it.

The image of a protected area as fortress with one large peripheral wall was recognised to be of limited use in combining the paradoxical challenges of conserving nature and providing an area for recreation and contemplation. A spatial solution was suggested to solve the problem: multiple boundaries designating specific areas for various uses (Beltran, 1964, p. 38; see also Monod, 1964, p. 263).

The Second World Congress on National Parks

A hundred years after the designation of Yellowstone and ten years after the First World Congress on National Parks, the Second World Congress on National Parks was convened in Grand Teton National Park in the United States. The conflicting forces apparent in the First World Congress, balanced between a romantic ideal of wilderness and the scientific need for the 'preservation' of nature and natural resources no longer coexisted peacefully.

In a provocative statement at the beginning of the congress, Nicholson severely blamed the proponents of the romantic movement according to whom parks were "still viewed as the living embodiment of romantic values, and therefore as an unashamed anachronism in the modern world" (Nicholson, 1974, p. 33). To move beyond such a vision, he suggested that parks could only be managed by scientific pragmatists, since allowing "the compulsively emotional champions to continue to dictate policy and to handle tactics would be to condemn the movement to go down in limbo" (Nicholson, 1974, p. 33).

The position of science as arbiter was reinforced. Concepts such as carrying capacity, population control, ecological equilibrium and plant succession became widespread (Reed, 1974, p. 40). This did not mean that the biological sciences reigned unchallenged as new societal approaches emerged. Issues of local population involvement, economic value, visitor use management, and social and economic development also engaged park managers. No longer exclusively an idealist or a natural scientist, the ideal park manager was 'thought to be an ecologist with a strong social science capacity' (Erz, 1974, p. 154).

Protected areas were no longer fortresses. It was "highly important that parks should not be treated as isolated reserves, but as integral parts of the complex economic, social, and ecological relationships of the region in which they exist" (Hartzog, 1974, p. 155). Hartzog argued against what he called the 'forester syndrome' which monopolized much of national park management, saying that "it is high time that we recognize that sociologists are as important as natural scientists" (Hartzog, 1974, p. 158). Quite why sociologists to the exclusion of other social scientists were selected for this role was unclear. Nevertheless, the natural science hegemony was losing ground. Science and planning became tools to reconcile use with preservation. Humans were no longer on the outside, looking in, but were acting in the centre of the action, trying to simultaneously read and write the user manual.

Protected area boundaries

The main change in the ten years between the two congresses was the appearance of new models of protected areas, variously termed 'natural park', 'landscape park' or, in the case of Britain, confusingly labelled 'national park'. These were protected areas that no longer followed the wilderness ideal, but rather were areas "in which agriculture and forestry, hunting and fishing can still be pursued but where urbanization and industrialization are barred" (Harroy, 1974, p. 26). Protected areas as fortresses of encircled wilderness were increasingly questioned.

The idea of specific zonations within protected areas prevailed as one way of overcoming differing objectives. Nicholson noted that "the existing boundaries of many parks need urgently to be reviewed, both to conform to ecological realities and to add buffer areas in cases where incompatible development just across the boundary would compromise the integrity of the park (Nicholson, 1974, p. 36). A pragmatic approach to boundaries gained standing, contrary to previous definitions of the outer boundary as inviolate: "a too literal-minded and rigid insistence on the unalterability of every park boundary is almost certain to give reason to think that no boundary will ever be adjusted by reasonable means (...) some of which are well-known to have been hastily fixed for mistaken reasons in the past" (Nicholson, 1974, p. 36).

However, the actual criteria for defining the boundaries of a protected area were still open to debate. Boundaries should follow ecological features since "instead of moving to acquire the smallest possible area, we must now consider the maximum feasible area, then delineate management boundaries with a full consideration toward maintaining ecosystem integrity" (Reed, 1974, p. 42). Likewise, "in the past, national park boundaries have usually been drawn to delineate a fairly compact area of simple shape. There could be greater elasticity in the areas chosen for designation" (Crowe, 1974, p. 164). However, she also noted that "the essential boundary of the area must be assessed, both for biotic reasons and visual integrity" (Crowe, 1974, p. 165).

In parallel to issues of local definition, the idea of a representative 'world network' that emerged in the First World Congress gained further ground (Curry-Lindahl, 1974, p. 93). Thus "the process of land planning is a series of plans, progressively becoming more detailed and more localized, but each fitting into the wide, overall concept of a master plan. In this hierarchy, the planning of national parks should be seen as an ingredient of total, worldwide conservation of resources localized, in the first place, into a broad master plan for a whole country or region" (Crowe, 1974, p. 163).

A protected area boundary was no longer a high wall keeping people out, but rather could be compared to a filter letting selective influences through. Managers therefore had to insure through spatial planning and management that the boundaries of the protected area fulfilled this crucial filter role.

The Third World Congress on National Parks

The Third World Congress on National Parks was held in Bali, Indonesia, in 1982. Unlike the previous two, dominated by North American and European participants, the third was overwhelmed by managers from many developing countries, reflecting the fact that in the previous ten years 'more national parks have been established in the Third World than anywhere else' (Malik, 1984, p. 10). The Congress Proceedings reflected this worldwide representation, dividing the report into nine 'realms' representing different biogeographical provinces (Udvardy, 1984, p. 34), avoiding political units. Each 'realm' was divided up into 57 'biogeographical provinces', suggesting a new world map based on purely biophysical criteria. In addition, since the idea of a global network was accepted by all, and enshrined in programmes such as UNESCO's World Network of Biosphere Reserve initiated in 1976 and including 208 sites by this time, such a classification was meant to help in "identifying major holes in the protected area network" (Harrison et al., 1984, p. 25).

The Third Congress reflected an increasingly pragmatic approach. While the importance of 'the wilderness and sacred areas on which so many draw for aesthetic, emotional, and religious nourishment' (McNeely, 1982, p. xi) was not diminished, the need to 'recognize the economic, cultural, and political contexts of protected areas' (McNeely, 1982, p. xi) was enshrined in the Declaration. Rather than applying one North American model around the world a diversity of approaches was needed in different situations within the limits of environmental 'sustainability', a term endorsed by the World Conservation Strategy in 1980 (IUCN, 1980). For the first time, the Proceedings included a strict series of definitions of the different categories of protected areas, ranging from one to ten. Diversity was codified and stringent protection 'is not necessarily appropriate for all areas which should be kept in a natural or semi-natural state' (McNeely, 1984, p. 1)

The need for a change in management philosophy was identified. This was summarised as 'the approach that a park is being protected against people, to the approach that it is being protected for people' (Talbot, 1984, p. 15). Although such formulas were also used in the previous Congress, the need to make protected areas contribute to development effectively gained strength, making them 'responsive to the needs of development' (Talbot, 1984, p. 16). Consequently, "far from being considered as 'set aside', a park should be viewed as being 'brought into' the main arena of human affairs" (Myers, 1984, p. 656), accepted as an established phenomenon in a crowded world.

Protected area boundaries

The idea that "even if the boundaries are fenced, there is inevitable interchange between the area and the surrounding world" (Croze, 1984, p. 628) was accepted, and even if the area appeared to be a self-contained ecosystem "there will inevitably be trickles of energy and nutrients across the boundaries" (Croze, 1984, p. 628). The view that parks had to be part of the wider landscape, including people and local communities, also made ecological sense: "Whatever may have been desired for them, parks can never be 'islands'. (...) Across a park's boundary, as across its ecosystem frontier, there are all manner of dynamic fluxes" (Myers, 1984, p. 658). Yet hiding behind the discourse of anthropic action, Muir's 'boundless nature' lurked: "when we draw a line on a map and declare that within that line is a park, we make a gross intrusion on the landscape: we try to demarcate two separated entities in nature's seamless web of affairs" (Myers, 1984, p. 658; see also Garratt, 1984, p. 66). Thus the idea that protected areas could be isolated from the rest of a human-dominated area dissolved: "it is a mistake to suppose that a protected area can be isolated, through park manager's fiat, from its hinterland" (Myers, 1984, p. 658).

In many ways, as Hales noted, "the perspective had changed. No longer was the view from the border inward; the debate was whether one should focus outward from the border, or whether borders existed at all" (Hales, 1989, p. 141). Boundaries were increasingly likened to filters, letting selective elements through. The spatial model endorsed was concentric zoning, fulfilling various objectives within one area. Thus, "this multiple-use approach is to achieve all its goals by use of concentric zoning. The park core will be protected, human needs will be met, preservation and development will coexist across a series of barrier zones so designed that all the purposes of each will be attainable" (Hales, 1989, p. 142). The idea of a buffer zone was reinforced since "regrettably, and to the great detriment of the park movement, the border zone strategy has not been fostered with a fraction of the enthusiasm it merits" (Myers 1984, p.659). Buffer zones – a surprisingly militaristic term - were an interesting element in the evolution of the concept: boundaries were no longer linear, but zonal.

Integrated regional planning stemmed from this idea of filters, complicating the idea of zonation. It was endorsed as a physical link between protected areas, adjacent land and human relationships to such areas (Garratt, 1984, p. 71). The actual physical definition of the area to which such an integrated plan was to be applied was also important. Arguments relating to "the extent and boundaries of the planning region in logical geographical, ecological or human terms" (Garratt, 1984, p. 66) were mentioned, although what constituted a 'logical' geographical term was not specified other than as a combination of criteria linked to geology and soils, hydrology and scenic quality.

Thus the boundaries of protected areas changed from walls and fences to filters, no longer necessarily keeping humans out but supposedly integrated into the human use of the land. While 'national parks' were still promoted, other forms of protected area gained increased recognition implying different boundaries to different types of protected areas. Some were designed to keep people out, some to keep some human uses outside an area and some to keep people in 'anthropological reserves' 'to allow the way of life of societies living in harmony with the environment to continue undisturbed by modern technology' (CNPPA, 1984, p. 52).

The Fourth World Congress on National Parks and Protected Areas

Reflecting changes in terminology, the Fourth World Congress on National Parks and Protected Areas was held in Caracas, Venezuela, in 1992. The diversity and quantity of material presented meant that no single report was produced but rather a series of workshop summaries, as well as the Caracas Declaration and the Caracas Action Plan, a series of objectives endorsed by the Congress.

The tremendous diversity of topics addressed reflected the increasing roles taken on by protected area managers, making it clear "that the park guard and park naturalist are being joined by the park community affairs officer, and earning the support of local people is being seen as a management opportunity, as well as a challenge" (McNeely, 1993, p. 192). While the first protected areas used romantic language, subsequent ones turned to scientific terms. In 1992, a surprising new language appeared, in which users of protected areas were referred to as 'customers' or 'market', and protected area management was termed a 'business' (McNeely, 1993, p. 192). Social, cultural and political issues were central to the success of protected areas. The premise was that "we need to be more aggressive in marketing the goods and services of protected areas" (McNeely, 1993, p. 192). The private sector was called in as a possible partner and funder, as were local communities, nongovernmental organisations and... women (McNeely, 1993, p. 193). Arguments with an economic flavour appeared more and more, and protected area managers were expected to "use the park's assets as a base upon which to build customer satisfaction, investment and interest" (McNeely, 1993, p. 192).

Protected area boundaries

The concept of the protected area as island received further scorn, since "such an 'island mentality' is fatal in the long run" (McNeely, 1993, p. 8). The idea that protected areas needed to be integrated into "broader regional approaches" (McNeely, 1993, p. 9) was endorsed by the appearance of the term 'bioregion', "used to describe extensive areas of land and water which include protected areas and surrounding lands, preferably including complete watersheds, where all agencies and interested parties have agreed to collaborative management" (McNeely, 1993, p. 9). Arguments relating to natural boundaries for protected areas received wider support, in particular the idea that management should follow watersheds which provide "a natural unit for land and water management" (McNeely, 1993, p. 9). Such ideas extended to widespread calls for 'transboundary' protected areas,

illustrating the return to planning on the scale of nature, unbounded by political jurisdictions. Additionally, buffer zones were joined by complex spatial corridors, physically joining up protected areas.

Conclusions

In this short overview of the main trends within protected area boundaries, I have discussed the coexisting and divergent territorial ideologies that existed within the worldwide movement. The definition of these entities shed light on the (social) construction of spatiality or *social* spatialization, by laying emphasis on the role of different arguments relating to the nature of boundaries. This was encapsulated in two main distinctions deriving from the modernist nature / culture dichotomy: the spatial dichotomy between Insiders needing protection and Outsiders posing a threat; and the ontological distinction between biophysical and societal conceptions of boundaries.

The succession of ideologies within the protected area movement defined various Insides and Outsides constructed around differing understandings of whom or what should figure in each. Initially, romantic visions of 'nature' as the ultimate Other were constructed around the notion of 'wilderness', separate from human culture. Nature was a tableau for human contemplation. Engaging with it aesthetically further entrenched the divide. The boundary between human and non-human was ontologically unbreachable. Protected areas were nothing other than vignettes of wilderness with humans on the outside looking in across a boundary defining the archetypal Other. The boundary was defined on the basis of (societal) aesthetic criteria.

Subsequently, in a series of more or less defined steps, boundaries were taken to be concentric sieves attempting to blur the Inside and the Outside in a series of zones defining increasing levels of 'naturalness'. Certain people were considered more 'natural' than others and were allowed to be more or less permanent Insiders. Protected area managers were designated rational decision-makers in this process. Boundaries were defined around biophysical arguments with science as the 'objective' arbiter and definer. Concurrently, there was an increasing desire to include human activities in areas designated as 'protected' which appeared to be based on a less clear-cut dualism between nature and culture. Comprehensive wide-scale approaches including local communities and women as Insiders were promoted within an ideology of free-market capitalism and political devolution, entrenching the idea that the natural could be sold for profit as a commodity. This seemed to herald a new conception of nature.

Yet this merchandisation of nature did not lead to a fundamental rethink of the nature / culture dualism. Paradoxically, the attempt to incorporate protected and non-protected areas in the wider landscape, including through market processes, did not and could not lead to a rethinking of the dualism. The ontologically distinct biophysical and societal conceptions of boundaries could not be breached: rather than lead to a redefinition of nature / culture, the expansion of protected areas into 'networks' led to a return of the idea of boundless nature, to the idea that 'nature's seamless web of affairs' could not be divided. In fact, as a consequence of this, a return of the idea of 'natural boundaries' was apparent in notions such as 'bioregions' and 'ecoregions', heralding a return to forms of biophysical determinism. Nature, the archetypal Other, was seen to inherently contain spatialised political scenarios.

The 'conservation' or 'protection' of nature can be reduced to a question of boundary definition on a spatial level. Yet protected areas are spatial models constructed out of the struggle of people and organisations which remain overwhelmingly professionally separated along the nature/culture divide. There is therefore little understanding that such a process also entails the theoretical need to (re)define boundaries between nature and culture. Within even the most integrative protected area administrations, the natural and the social scientists and managers have not come up with ways of work that transcend this boundary, as any brief look at any protected area administration staff diagram will confirm. Until this happens, no amount of joined-up thinking or differentiated spatial scenarios will bring about new conceptions of protected areas that fully reflect the 'reinvention' of nature. For this to happen, the idea of boundaries will have to be rethought.

"The Fifth World Congress, held in September 2003 in Durban, South Africa, titled 'Benefits Beyond Boundaries' further challenged the way protected area boundaries were considered. This meeting was structured around a plethora of parallel sessions held within a vast conference centre, ironically - in view of the title - surrounded by barbed wire, high fences and tight security patrols. Perhaps the defining trend, referred to by Nelson Mandela in his opening speech, was the surge in enthusiasm for 'transboundary' initiatives spanning several countries. Yet, despite the positive rhetoric, such spatial models came no closer to grappling with the ontological puzzle of defining an integrative biophysical/societal spatial scenario. Instead, by further complicating the variety of boundaries involved in protected area planning, 'transboundary' initiatives create an even more urgent need in the future for a critical understanding of the socio-spatial processes involved in protected area planning."

References

- Adams A.B., 1962: How it began. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.
- Badshah M.A., 1962: National parks: their principles and purposes. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.
- Beltran E., 1962: Use and conservation: two conflicting principles. First World Conference on National Parks. Proceedings of a conference or-

ganized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.

- CNPPA, 1982: Categories, objectives and criteria for protected areas. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- Cordell J., 1993: Boundaries and bloodlines: tenure of indigenous homelands and protected areas. The Law of the Mother: Protecting Indigenous Peoples in Protected Areas. E. Kemf. San Francisco, Sierra Club Books: 61–68.
- Craven I. and Wardoyo W., 1993: Gardens in the forest. The Law of the Mother: Protecting Indigenous Peoples in Protected Areas. E. Kemf. San Francisco, Sierra Club Books: 61–68.
- Crowe S., 1972: The master plan for national parks and their regional setting. Second World Conference on National Parks. Proceedings of a Conference sponsored and organized by National Parks Centennial Commission of the United States of America, National Park Service of the US Department of the Interior, and International Union for the Conservation of Nature and Natural Resources. Cosponsored by UN-ESCO, FAO, Natural Resources Council of America, Yellowstone and Grand Teton National Park, September 18–27, IUCN for National Parks Centennial Commission, Morges.
- Croze H., 1982: Monitoring within and outside protected areas. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- Curry-Lindahl K., 1972: Projecting the future in the worldwide national park movement. Second World Conference on National Parks. Proceedings of a Conference sponsored and organized by National Parks Centennial Commission of the United States of America, National Park Service of the US Department of the Interior, and International Union for the Conservation of Nature and Natural Resources. Cosponsored by UNESCO, FAO, Natural Resources Council of America, Yellowstone and Grand Teton National Park, September 18–27, IUCN for National Parks Centennial Commission, Morges.
- Erz W., 1972: The broad aspect of planning and management for the future, with emphasis on physical and living resources. Second World Conference on National Parks. Proceedings of a Conference sponsored and organized by National Parks Centennial Commission of the United States of America, National Park Service of the US Department of the Interior, and International Union for the Conservation of Nature and Natural Resources. Cosponsored by UNESCO, FAO, Natural Resources Council of America, Yellowstone and Grand Teton National Park, September 18–27, IUCN for National Parks Centennial Commission, Morges.
- Fall J.J., 2003: Planning protected areas across boundaries: new paradigms and old ghosts. Journal of Sustainable Forestry, **17** (1–2): 81–102, reprinted in (2003) "Transboundary Protected Areas: The viability of Regional Conservation Strategies", The Haworth Press, New York.
- Gadgil M., 1996: Managing biodiversity. Biodiversity: a Biology of Numbers and Difference. K.J. Gaston. Oxford, Blackwell Science: 345–366.
- Garratt K., 1982: The relationship between adjacent lands and protected areas: issues of concern for the protected area manager. World Congress on National Parks : National Parks, Conservation and Development The Role of Protected Areas in Sustaining Society, Bali, Indonesia, Smithsonian, Washington.
- Hales D., 1989: Changing concepts of national parks. Conservation for the Twenty-First Century. D. Western and M. Pearl. Oxford, Oxford University Press: 139–165.
- Harrison J., Miller K. et al., 1982: The world coverage of protected areas: development goals and environmental needs. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational,

Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.

- Hartzog G.B., 1972: Management considerations for optimum development and protection of national park resources. Second World Conference on National Parks. Proceedings of a Conference sponsored and organized by National Parks Centennial Commission of the United States of America, National Park Service of the US Department of the Interior, and International Union for the Conservation of Nature and Natural Resources. Cosponsored by UNESCO, FAO, Natural Resources Council of America, Yellowstone and Grand Teton National Park, September 18–27, IUCN for National Parks Centennial Commission, Morges.
- IUCN, 1980: The World Conservation Strategy: Living Resource Conservation for Sustainable Development. Gland, IUCN - The World Conservation Union / UNEP - United Nations Environment Programme / WWF - World Wildlife Fund.
- Knobel R., 1962: Scientific and popular use: a conflict. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.
- Landres, P.B., Knight R.L., et al., 1998: Ecological effects of administrative boundaries. Stewarship Across Boundaries. R.L. Knight and P.B. Landres. Washington D.C., Island Press: 371.
- Lees A., 1993: Melanasia's sacred inheritance. The Law of the Mother: Protecting Indigenous Peoples in Protected Areas. E. Kemf. San Francisco, Sierra Club Books: 69–76.
- Malik A., 1982: Opening address: protected areas and political reality. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- Martin C., 1993: Introduction. The Law of the Mother: Protecting Indigenous Peoples in Protected Areas. E. Kemf. San Francisco, Sierra Club Books: xvi–xix.
- McNeely J.A., 1982: Introduction: protected areas are adapting to new realities. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- McNeely J.A., 1992: Onward from Caracas. Parks for Life: Report of the Fourth Congress on National Parks and Protected Areas, Caracas, Venezuela, IUCN – The World Conservation Union in collaboration with WWF – World Wildlife Fund.
- Monod T., 1962: The strict nature reserve and its role. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.
- Myers N., 1982: Eternal values for the Parks movement and the Monday Morning World. World Congress on National Parks : National Parks, Conservation and Development - The Role of Protected Areas in Sustaining Society, Bali, Indonesia, Smithsonian, Washington.
- Nicholson E.M., 1972: What is wrong with the national park movement? Second World Conference on National Parks. Proceedings of a Conference sponsored and organized by National Parks Centennial Commission of the United States of America, National Park Service of the US Department of the Interior, and International Union for the Conservation of Nature and Natural Resources. Cosponsored by UN-ESCO, FAO, Natural Resources Council of America, Yellowstone and Grand Teton National Park, September 18–27, IUCN for National Parks Centennial Commission, Morges.
- Olson S.F., 1962: A philosophical concept. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural

Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.

Paasi A., 1996: Territories, Boundaries and Consciousness: the Changing Geographies of the Finnish-Russian Border. London, ...

Shama S., 1995: Landscape and Memory. London, HarperCollins.

- Talbot L., 1982: The role of protected areas in the implementation of the World Conservation Strategy. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- Udall S.L., 1962: Nature islands for the world. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural

Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.

- Udvardy M.D.F., 1982: A biogeographical classification system for terrestrial environments. Proceedings of the Third World Congress on National Parks, International Union for the Conservation of Nature and Natural Resources in cooperation with United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, World Wildlife Fund-US, Parks Canada, United States National Park Service, Bali, Indonesia, 11–22 October, Smithsonian Institution Press, Washington DC.
- Wirth C.L., 1962: National Parks. First World Conference on National Parks. Proceedings of a conference organized by The International Union for the Conservation of Nature and Natural Resources, cosponsored by UNESCO, FAO, US National Parks Service, Natural Resource Council of America, Seattle, Washington June 30–July 7, National Park Service, United States Department of the Interior.