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From Wilderness Preservation to the Fight for Lawlands: towards a Revisioning of Conservation

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Abstract

What is the proper object of conservation? The category of *wilderness* is here considered in response to this philosophical question. The historical transition from conservation based on wilderness preservation to conservation framed in terms of the category of *biodiversity* – a transition that took place in the1980s and 1990s – is also outlined. The failure of both categories to capture the intended object of conservation is analysed. A new category is accordingly proposed. This category references both Indigenous Law and an intensional understanding of the environmentalist's category of *nature* in terms of indwelling principles of unfolding, specifically the principles of conativity and accommodation/least resistance. It is concluded that the category of *Law* itself, or, less abstractly, lands that conform to Law – here styled *Lawlands* - may better capture what it is that conservationists are seeking to save. Lawlands would be understood as inclusive of local human – usually Indigenous – communities that live in accordance with Law.

Introduction

For decades now the conservation movement has been rear-guard in its orientation, fighting mainly to prevent extinctions – generally of species but also of genotypes and vegetation communities. Spectacularly unsuccessful in achieving even these rear-guard goals – as the advent of our present era of mass extinctions attests (IPBES 2019) – the movement has lacked the confidence to set itself more ambitious goals. To what extent has this rear-guard approach – adopted of course in face of the seemingly invincible power and influence of global 'development' interests – in fact contributed to the failure of the movement to avert runaway ecological collapse, and how did this rear-guard mentality come about?

Looking back: from the category of wilderness to that of biodiversity

To most of us in the present historical moment, the statement that the goal of conservation is to prevent extinctions might seem self-evident. What else could it be, we wonder? But in fact such a construal has a relatively short history – it became definitive only in the 1980s. Prior to that, from the time of the emergence of modern environmentalism – which is sometimes dated to Rachel Carson's *Silent Spring* in 1962 – a major goal of conservation had been the preservation of *wilderness*.

The notion of wilderness, which appears as a narrative trope as far back as biblical times, had of course been subject to a notoriously chequered history. This history has been voluminously detailed in recent decades, so I shall not dwell on it unduly here. Suffice it to say that right up until the Romantic period of the late 18th–early 19th century in Europe, the connotations of the term, *wilderness*, were largely (though never exclusively) negative, signalling exile, hostility and danger for human beings. Far from being a potential object of conservation then, wilderness had long been an object of aversion and fear (Nash 1967; Cronin 1995; Thomas 1984). With Romanticism however, the notion assumed a new spiritual significance, promising escape from the strictures of civilization and from stifling forms of conventionality and domestic confinement across many spheres of social life (Nash 1967; Cronin 1995; Rigby 2004; Henderson 2014). The valorization of wilderness was integral to the Romantic revolt against the rationalist complacency of the Enlightenment.

In the context of the early environment movement of the 1970s, and perhaps under the influence of Aldo Leopold's land ethic, the notion of wilderness retained this positive value but the more spiritual of its Romantic associations became backgrounded to explicitly ecological meanings. Wildernesses were understood as terrains of intact ecosystem dynamics and unfolding evolutionary processes wherein all forms of life were free to follow their own ends in their own ways (Devall and Sessions 1984, 126-129; Rolston 1988). While it was the basic purpose of the landmark US Wilderness Act of 1964 to afford ecological protection to such lands, the Act misguidedly construed such terrains in Eurocentric terms as lands that had never been significantly disturbed by human impacts, thereby erasing centuries of active ecological management on the part of Indigenous inhabitants (Woods 2001).[1] Under the same misapprehension, the Act categorically proscribed any kind of human occupation in designated wilderness areas.

This was a pattern followed in other parts of the world: large, ecologically intact terrains came under state control for the purpose of environmental protection

[1] The term, 'wilderness', is defined as follows in the Act: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value." Wilderness Act 1964, Section 2.C. See Wilderness Connect website.

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but the key role of Indigenous practices in maintaining and enhancing the ecological integrity of the lands in question was overlooked. In some cases, where Indigenous communities were still actively managing their estates, they were forcibly removed to ensure that the newly gazetted reserves would qualify as wilderness areas ie lands unoccupied by humans (Brockington and Igoe 2006; Callicott 2008; Vidal 2016). By the 1980s and 1990s however, when Wilderness Acts were passed in various Australian states, specifically New South Wales and South Australia, historical lessons had been learnt: wilderness was still defined in primarily ecological and evolutionary terms but the history of Indigenous occupation and management of the lands in question was, at least rhetorically if not substantively, acknowledged (Mackey and Rogers 2015).

Philosophical disquiet and controversy nevertheless continued to surround the notion of wilderness. It is, again, not my intention to review this extensive critique in detail here.[2] It will suffice for my purposes to mention not only the objections emanating from Indigenous viewpoints, already touched upon, but the post-colonial critiques which insisted on the right of developing nations to exploit natural resources just as colonial nations had done in the course of their rise to wealth and imperial power. Nations now seeking to escape the grip of poverty, often occasioned by colonialism, tended to be sceptical of attempts by *ex situ* conservation organisations based in wealthy countries to preserve as wildernesses resource-rich areas in the developing world. The ideology of wilderness preservation, viewed as a ruse to block development in impoverished countries, was spurned as a new iteration of colonialism (Guha 1997, 2003).

This kind of argument – that construed wilderness preservation as ideology – was also sometimes taken up by Indigenous Owners who not only demanded acknowledgment of their prior occupation and management of lands now defined by colonial authorities as wildernesses, and their right of continued occupation of those lands, but also insisted on their entitlement, if they so chose, to open those lands up for industrial exploitation (Neale 2017).

The category of wilderness as a basis for conservation also came under scrutiny from a scientific perspective: was wilderness a reliable indicator of ecological value? Wilderness areas with outstanding scenic values, such as remote and rugged mountain ranges, might not always be as ecologically rich and diverse as smaller, nondescript-looking remnants already impacted by industrial processes (Rodman 1983). In my own home state of Victoria in south-eastern Australia, for example, only one per cent of the original estate of native grasslands remain intact after the ravages of almost two hundred years of European 'settlement'. Despite the scruffy, unprepossessing appearance of these scattered remnants, their ecological value may be high – higher perhaps than that of certain iconic wildernesses, such as vast and remote areas of tundra in the Arctic.

[2] For a round-up of many of the arguments for and against wilderness as a category of conservation, see the two volumes edited by J. Baird Callicott and Michael Nelson (1998; 2008).

Philosophers committed to ecocentrism in ethics also tended to be uncomfortable with the Romantic overtones of wilderness discourse, its perception of wilderness as a human amenity and its emphasis on the spiritual and therapeutic benefits of wilderness for the sensibilities of humans jaded by an excess of civilization. Not only did such perceived quasi-mysticism risk forfeiting the scientific respectability of conservation, it also seemed to mark a reversion to the kind of anthropocentrism in ethics that many environmental philosophers repudiated (Rodman 1983). Some environmental philosophers accordingly either gave up the category of wilderness as a basis for conservation, as Callicott did (Callicott 2008), or insisted on its wholesale redefinition in ecocentric terms: wilderness, if it were to be reclaimed, would need to be understood in strictly ecological terms and defended on strictly ecological grounds (Snyder 1996; Foreman 1998).

Partly as a result of such ongoing controversy and contention, the category of wilderness began in the late 1980s to be quietly backgrounded, at least in conservation science, government and policy discourses. It continued to flourish as a trope in some non-government and activist organisations, and was not yet entirely shelved in policy settings, making its appearance in various Acts, as for example, in Australia, via the New South Wales and South Australian Wilderness Acts (1987 and 1992 respectively) and Queensland's Wild Rivers Act (2005; repealed in 2014). But by the 1990s it was beginning to be replaced by a new normative category that was emerging at that time: *biodiversity*. 'Biodiversity', unlike 'wilderness', was scientifically definable and in this sense respectable. It was explicitly ecological in its intended meaning and it afforded a veneer of objective descriptiveness that 'wilderness', with its perceived aesthetic and spiritual connotations, patently lacked. (The fact that when biodiversity was cast as a goal for conservation it also itself became subtly normatively loaded – incorporating an 'ought' as well as an 'is' – was often overlooked (Mathews 2016a).) Biodiversity as a category also had the added advantage for conservationists that it brought off-reserve remnant communities and scattered populations within the ambit of conservation.

However, arguably the most crucial though unintended consequence of the shift from wilderness to biodiversity as the defining object of conservation was that where wilderness preservation had mandated the setting aside of vast realms of earth-life for their own sake, 'biodiversity' as a term focussed attention only on the *diversity* of life forms and not on the abundance or otherwise of populations. In other words, biodiversity was, by virtue of the very meaning of the term, geared merely to the saving of types rather than instances, where this was understood as equivalent to the prevention of extinctions. While extinctions could be prevented by ensuring the maintenance of minimum viable populations of species, such minimum viable populations might fall orders of magnitude below populations typically present in large wilderness areas. A simple change of framing categories thus in effect transformed the arithmetic of conservation, putting the movement on the back foot, ultimately dooming its small victories to attrition in the face of ever encroaching forces of development (Mathews 2016a).

To question the focus on biodiversity as an exclusive basis for conservation is not, of course, to deny that the fostering of biodiversity is central to any plausible version of the conservation project. Maintaining diversity – of species, genotypes and types of ecological community – is indeed a *necessary* condition for ensuring the resilience and adaptability of life systems. Biodiversity on its own, however, is not *sufficient* for conservation of anything but the – attritional – minimum. Abundance of instances as well as the preservation of types is required for effective conservation (Wilson 2016; Crist 2019).

At the same time as the transition from a rhetoric of wilderness to one of biodiversity was taking place, the notion of *development*, in the sense of large-scale modernization and industrialization, was being revised. 'Development' was of course another intensely normative category, uncritically harnessing the positive connotations of the term – as denoting a process of change towards higher states of organization – to anthropocentric ends. Wherever such 'development' could be pursued consistently with the maintenance of minimum viable populations of non-human species, it was now sanctioned and sanctified – legitimated – as 'sustainable development', as, for instance, in the UN Convention on Biological Diversity. Historically speaking, the two categories – of sustainable development and biodiversity conservation – came to define each other: if the goal of conservation were merely the maintenance of biodiversity, then all non-human populations surplus to minimum requirements for viability could be reduced – expunged – in order to make way for further human development. Such development would now glow with the pious conviction of its own legitimacy, never mind that, from the perspective of species largely divested of their ecological estates in the course of such 'development', this was anything but development, in the sense of attainment of higher states of organization, but rather outright *annexation*.[3] In the guise of 'sustainable development' then, as articulated in the United Nations Convention on Biological Diversity, societies were given moral licence to annexe the biosphere subject only to the condition that other-than-human species be minimally maintained in the remaining environmental margins.[4]

Conservation under this new, development-friendly, scientistic definition was thus indeed cleansed of the ideological 'baggage' of the older wilderness concept; but with the relative demise of this latter concept, the scope and very meaning of conservation as a project had undergone transformation. Conceptually purged

[3] For more on the historical inter-definition of biodiversity conservation and sustainable development, see Mathews 2016a.

[4] If you doubt this claim that the categories of biodiversity and sustainable development were mutually defining, try substituting 'wilderness' for 'biodiversity' in the definition of sustainable development offered by the Brundtland Report of the World Commission on Environment and Development. According to the Report, to achieve sustainability, "[d]evelopment patterns must be altered to make them more compatible with the preservation of the extremely valuable biological diversity of the planet" (WCED 1987: V, 9). Biodiversity is quantifiable and finite in a way that wilderness is not. One could not require of development that it be made compatible with the preservation of wilderness. Wilderness simply rules out development in the areas where it still exists.

from conservation thinking now was the value of *wildness*, which had always been, even if only implicitly, core to the meaning of wilderness. It has been customary, in the philosophical literature on wilderness, to trace the etymology of the term, 'wild' to 'will': wild things are self-willed things, things that are free to follow their own unadulterated natures (Foreman 2008; Van Horn 2017). Although as etymology this now seems to be in doubt (Henderson 2014), it points to the centrality of the notion of self-will in earlier understandings of the meaning of conservation. In valorizing wildness, the earlier movement had implicitly acknowledged the sovereignty of wild things and their entitlement to their own ways and terrains of life (Crist 2019). The sovereignty of earth-life, its moral entitlement to pursue its own business free from human interference, implicitly rested on the fact that, so left to its own devices, earth-life continually configured and reconfigured itself into normative patterns that ensured its own ongoing regeneration. There was a lawfulness in this patterning, a capacity for ongoing self-actualization, that aligned nicely with the notion of self-rule and hence of sovereignty. As the realm of the wild, of earth-life perpetually regenerating itself, wilderness inherited this mantle of sovereignty, with its corollary of transcendent normativity. By contrast, the notion of biodiversity, with its minimum viable populations, was consistent with images of earth-life subjugated and consigned to the fragmented interstices of human installations, of scientific surveillance and control, of counting and culling and tagging, of forced sterilization or test-tube reproduction, arguably even of DNA stored in laboratory freezers.

Wildness as a norm had touched deep chords of moral feeling – sometimes of yearning - in those who subscribed to it. With its evocation of an original scheme of things in which all beings, left to themselves, would act spontaneously and intuitively in ways that were inherently regenerative and for that reason intrinsically good and right, the appeal to wildness had hinted that we ourselves might have lost our true existential compass in surrendering wildness for the sake of civilization. It hinted that the inherited contours of our humanity might only be recoverable when wildness was restored as the core of our own being. A Romantic sense of the redemptiveness of wildness – as expressed in Thoreau's oft-repeated dictum, "in wildness is the preservation of the world" – was thus arguably still simmering inside the wilderness movement of the 1970s and 1980s, even though the thinking of the movement had become predominantly ecological in its overt understanding and objectives. It was arguably this appeal to wildness at the heart of the wilderness movement – an appeal alternately articulated and repudiated in ecophilosophies such as deep ecology – that had triggered passionate new forms of activism around the world.

The movement of biodiversity conservation, by contrast, referenced no such original scheme of things to which we ourselves might properly belong and in contact with which we might recover our own deepest telos. Instead it converted the rest of earth-life into a mere inventory of jigsaw types that could be arranged and re-arranged to suit the utilitarian requirements of narrow, materialistically conceived human 'development'.

It might have appeared to many conservationists in the 1980s and 1990s – regardless of whether their private ethical orientation inclined towards ecocentrism or anthropocentrism – that they had little choice publically but to embrace the mutually defining categories of biodiversity-based conservation and sustainable development. Some non-government conservation and activist organisations did resist the shift to a biodiversity frame of reference. But in the policy and corporate spheres, this new framework served to bring conservation back into line with the utilitarian outlook which held, and continues to hold, almost exclusive public sway in the developed world – and which the wilderness movement, with its resistance to the human annexation of vast terrains of earth-life, had threatened to subvert. The claims of biodiversity-based conservation make minimal inroads into the entitlements of a privileged species, *Homo sapiens*, which views the resources of the biosphere as properly its own, subject only to the limitation that other species qua species ought not to be by human appropriation entirely eliminated. In practice this means populations in the billions for us, and populations in the low hundreds or thousands for most of them. Such a version of conservation was well placed to appease moral qualms about the destruction of the natural world while subtly reinforcing the human development imperative and the anthropocentric presumption on which it rests. This perhaps helps to explain the ready uptake of conservation as nominal government policy in the 1980s – and the ensuing collapse of biospheric systems ever since.

It also perhaps helps to explain the further capitulation to anthropocentrism that has been evident in conservation circles in recent years in the shape of the eco-modernist movement. Once anthropocentrism had been largely conceded, and conservation reframed in minimalist biodiversity-terms, it was perhaps but a small step, in face of ongoing political pressures for development, to give up the fight even against extinctions, and settle instead for a construal of conservation as ancillary to, rather than as a brake on, development. From this perspective, the goal of conservation is no longer to limit industrial development but, wherever possible, merely to adapt local ecosystems to the undisputed requirement for such development. Gone now, in other words, is the line in the sand that defined conservation under its original biodiversity interpretation: that extinctions must be prevented. Under the eco-modernist interpretation, there is no line in the sand. Rather, conservation becomes an ad hoc, opportunistic exercise in salvaging whatever of the natural world might be salvaged consistently with perceived universal affluence for an unlimited humanity (Asafu-Adjaye et al 2015).

Having conceded so much then, how can conservation recapture its founding initiative and regain some of the moral ground that was lost to anthropocentrism in the transition from wilderness to biodiversity? In my own opinion, there can be no going back to wilderness as a defining category for conservation, wholly sympathetic though I am to the cause of contemporary wilderness advocates, such as E. O. Wilson and Eileen Crist. In retrospect we might admit that the term, 'wilderness', with its ambivalence towards Indigenous agency and its all-too-easily-caricatured Romantic undertones, was perhaps an overly controversial term to adopt for an objective that was basically ecological. At least, we might

admit this if an alternative term that retained the normative depth and complexity of 'wilderness' but was free of its political baggage could be found.

Looking forward: from the category of biodiversity to that of Lawlands

So, with a new era for conservation currently dawning - as climate change together with the new extinction catastrophe threatens to overwhelm us all, human and non-human alike (Wallace-Wells 2017; Bendell 2018) – it seems an apt moment to set aside previous, arguably flawed, moral categories, such as both wilderness and biodiversity, and raise again the question: what is the proper object of conservation?

The popular answer to this question has always been, at any rate in the English language, simply, *nature*. But it was the patent incapacity of 'nature' as a term to capture exactly what it was that conservationists were seeking to protect that led historically to rhetorics of wilderness and biodiversity. As an answer to this question, 'what is the object of conservation', 'nature' as a term commits us either to too little or too much. It commits us to too little if it is used, as it often is, to encompass all that falls within the domain, or under the laws, of physics – all that is part of the natural, as opposed to some notional supernatural, order. So understood, nature cannot be diminished. Energy is conserved whatever we do: within the domain of physics patterns of creation and patterns of destruction continually succeed and overtake one another without net loss. If, on the other hand, 'nature' is used, as it generally is in popular environmental contexts, to denote all of earth-life exclusive of humans, then conservation seems to commit us to too much – to a hands-off relationship with our entire natural environment. This would logically necessitate radically reversing the processes of civilization and effectively returning to lifestyles reminiscent of those of our hominid ancestors. Whatever the moral merits of such a proposal, it has no hope whatsoever of being accepted by contemporary modern societies.

What then is this 'nature' that conservationists might properly seek to protect? A more satisfactory answer might be found if we interpret the intended 'object' of conservation not so much extensionally, as consisting of certain kinds of non-human living entities – trees, grasses, ecosystems, etc – but rather intensionally, in terms of certain indwelling normative principles, specifically those that are discernible in the behaviour of flourishing organisms and ecosystems. These are the principles - I shall identify them in a moment – which produce the patterns of regenerativity that we associate with life. As it happens, we can choose to follow these principles in our own behavior as well as observing them in the dynamics of biological systems. We can likewise derail and derange them in biological systems just as we can choose to deviate from them ourselves. The 'object' of conservation would thus consist, from this perspective, not in a class of entities 'out there', but in a particular pattern of unfolding which we can at any moment either suppress or allow – whether in ourselves or in our earth community.

The principles I have in mind here may be identified as (i) the principle of conativity and (ii) that of accommodation and least resistance.

By *conativity*, I mean the impulse that prompts all living things to preserve and increase their own existence. It is only by virtue of this capacity for self-reference, with its associated drive towards self-existence, that living things count as living at all.[5] But in extra-human scenarios this drive is qualified by the principle of *accommodation* and *least resistance*: organisms which conserve their energy by adapting their ends as far as possible to the ends of the organisms surrounding them will be naturally selected over organisms which needlessly provoke resistance and competition from others (Mathews 2011).

In China, this principle of adapting one's ends to the ends of others, while in the process letting the efforts of others carry one towards a destination consistent with one's interests, seems to parallel the Daoist notion of *wu wei*. *Wu wei* translates literally as *non-action*, but non-action may be understood, at least under a certain interpretation, not as passivity but as this very process of accommodation and adaptation to the ends of others. *Wu wei* in this sense enables one to conserve one's own energy not by relinquishing desire but by adapting one's desires to the desires of others. By making one's desires consistent with what others want, one can at least partly rely on those others to make the effort required for the successful achievement of one's ends (Mathews 2011).

In the biosphere, the behavior of most species broadly follows the principle of accommodation and least resistance because this is a strategy that, being energy-conserving, logically drives natural selection. Species whose behavior regularly fails to conform to these principles will eventually be selected out of existence. Adaptive forms of conflict, competition and predation do of course also occur in nature. Where the interests of particular species or individuals cannot achieve synergy in a process of mutual adaptation, conflict will result. But such conflict will always entail an energy-cost for the species or individuals in question, so modes of conflict themselves will in turn tend to be adaptively shaped by the principle of least resistance. (Martial arts follow this model of conflict: practitioners learn to conserve their own energy by turning the force used by opponents back on those opponents themselves). At the end of the day, the imperative to desire what others need one to desire will be what ensures that every living thing, in seeking its own self-existence, at the same time perpetuates the larger system that configures and sustains that existence. Here in Australia, for example, many small marsupials, such as bettongs and bandicoots, desire truffles and tubers, and in the process of digging for them aerate and otherwise improve woodland soils, thereby helping to assure the future of the woodlands that freely provide what these small marsupials require.

Within the specificity of different environmental circumstances then, such adaptivity to the ends of ecological others helps to shape the morphology and functionality of each organism. Working together, the two principles result in

[5] This active will towards self-existence, characteristic of certain kinds of systems, has sometimes been termed, 'autopoiesis' (Maturana and Varela 1980). I however prefer the much older term, 'conativity' or 'conatus' – defined by Spinoza in the 17th century as the 'will to persevere in one's own existence' – for its philosophical richness.

systems of mutual accommodation: each organism seeks its own existence in ways that help to perpetuate the existence of the organisms surrounding it. In aggregate, mutually adaptive organisms make up larger, self-perpetuating systems. In other words, the principle of accommodating others by adapting one's own conativity to theirs assures the ongoing regeneration of life.

In light of the definition of wildness, cited earlier, as the property that organisms exhibit when allowed to unfold in accordance with their own natures, we could say that things that follow the twin principles of conativity and accommodation/least resistance count as wild. The larger, self-perpetuating systems made up of such organisms interacting in aggregate seem a good match for what conservationists intend by the term, 'wilderness'.

As humans however, we have been released from the evolutionary grip of accommodation and least resistance. Historically, with the advent of agrarianism and hence civilization, we began to substitute external sources of power, such as domesticated animals, slaves and eventually fossil fuels, for the energy available to us from our own bodies. This has enabled us – unlike other species which seek to pit themselves against others but suffer exhaustion and selective disadvantage as a result – to impose ourselves on our environment with impunity.[6]

Our departure, as humans, from naturally selected propensities is enabled by our highly developed reflexivity – our capacity to reflect on and hence to change both our environment and our own behavior. This enables us to invent new ways of pursuing ends but also to substitute new, culturally mediated ends for the naturally selected ends that tend to be the lot of other species. So, for example, instead of desiring sweet fruits that we may have been naturally selected to crave because in consuming them we disperse their seeds, we may now desire candy in bright plastic wrappers, the consumption of which in no way serves the interests of other species. In developed societies we have indeed largely stopped desiring what earth-others need us to desire and have so far gotten away with this, at massive cost to the rest of earth-life. Perhaps we can even continue to get away with it, replacing the biosphere with an engineered global techno-

[6] It is not only agrarian societies that have departed from the principles of accommodation and least resistance in this way. Pre-agrarian societies sometimes did so too, as, for instance, the societies that, in different parts of the world and with the aid of long-range weapons, hunted mega-fauna to extinction (Yong 2018). That these societies were able so to impose on other species without either exhausting themselves or compromising the integrity of the ecosystems on which they themselves depended is presumably due to the fact that (i) long-range weapons greatly diminished the effort involved in hunting, and (ii) the societies themselves, by their own intentional efforts, substituted for the ecological functionality of the extirpated species. Mega-fauna were often responsible for keeping woodlands from encroaching into grasslands, for example. Societies which depended on grasslands for game but extirpated the mega-fauna which sustained the grasslands would have to have worked to sustain the grasslands themselves, which they often did by the use of fire. Fire itself is arguably however a 'least effort' modality, compared with more intensive forms of effort, such as those involved in agriculture.

imperium designed to serve our own ever-changing culturally selected ends exclusively.

But if we wish to inhabit a *living* planet and not merely an engineered global techno-imperium, then we need to restore the patterns of accommodation and least resistance that enable the ongoingness of life. By way of the same reflexivity that enables us to depart from these patterns, we can at any moment choose to align with them anew – we can review our desires in order to realign them with what our larger earth community needs us to want. To do so would be to reinstate 'nature', in the present revised, intensional sense, within ourselves, where this would result eventually in a return to the order of renewal and regeneration that is the defining logic of earth-life.

Although the inner principles here identified as constituting that logic have not generally figured very explicitly in Western literature, they, or variants of them, figure prominently in certain Indigenous traditions, where they are coded as *Law*. In traditional China, as I have already observed, the principle of least resistance bears notable affinities to the notion of *wu wei*, which is, according to the founding text of Daoism, the *Daodejing*, the modality whereby one follows Dao, the Way, where Way, like Law, connotes a normative principle, a principle moreover of adaptation. Daoism is the Indigenous tradition of China, with its deepest roots in early shamanic societies that antedate civilization. The metaphysical dynamic that internally structures Dao as a normative cosmology is that of yin-yang polarity. Amongst the affairs of the 'Ten Thousand Things' – the individual things that make up the empirical world – yin-yang polarity is exhibited in the forces of push and pull that arise from disparate conativities. Though potentially pulling in different, sometimes opposite, directions, these conativities may, through mutual adaptation – whether at an evolutionary level or at the level of reflective choice – achieve a dynamic balance, such that no single set of interests overwhelms another. This generative process of mutual accommodation may be seen as constituting Dao, the pattern of unfolding that emanates when things adhere to the energy-conserving path of *wu wei* (Mathews 2016b).

Closer to home, the twin principles of conativity and accommodation/least resistance bear a striking affinity to Aboriginal notions of Law. Law, as understood throughout Aboriginal Australia, is not so much a human construct as a dimension of normativity inherent in reality itself: Law is already immanent in land (Black 2011; Watson 2000; Graham 2019) – which is why the term is capitalized here, to distinguish it from the purely conventional system of human-authored social rules that constitutes law in a European or Western sense. Life unfolding in accordance with Law is inherently regenerative: it is self-organized at every level of living systems to beget life. Once discovered, Law may be adapted by societies not only to provide guidelines for care of the environment but as a normative template for the social and economic organization of human communities themselves.

Accounts of the principles informing Law vary, but, being immanent in land, and in this sense having ontological as opposed to merely conventional status, these

principles tend to have been discovered and rediscovered throughout millennia by different Aboriginal peoples across the continent. The narrative coding varies from one people to another – Law is articulated and conveyed via locally specific Dreaming stories – but across these codings, common underlying social norms and obligations to country remain discernable.

According to an account offered by Kombumerri/Munaljahlai scholar, Christine Black, based on in-depth interpretation of texts left by several Senior Law Men of Aboriginal Australia, Law is essentially a Law of Relationship. Its central aim is continually to draw competing interests and opposing forces into interdependence and hence into dynamic balance, thereby preventing any one force or set of interests from overwhelming another. In order to enshrine Law in human institutions, Aboriginal societies are organized into moieties, ritual groups whose relations are strictly prescribed to ensure a balanced negotiation of difference and competition. Hannah Bell, a colleague and interpreter of Ngarinyin Senior Law Man, David Mowarljarlai, of the Kimberley in far north-western Australia, explains:

> All these northern tribes have a belief system based on a philosophy of relationship, that in all of existence there are always two-two moieties (groups), two energies, two genders, two dimensions of existence such as above and below, seen and unseen, action and idea, generative and receptive. The dynamic of relationship holds that neither one is viable without the other, that survival and increase are dependent upon their interactivity, like the dual strands of DNA whose chemical bonds govern the growth and life of an organism. (Bell quoted in Black 2011, 46)

This dyadic archetype, like yin and yang in Daoism, provides a template for the primacy of mutuality and interdependence that can then be extended to multilateral human and natural systems.

Deborah Bird Rose offers a complementary account of Law in her classic ethnography, *Dingo Makes Us Human*, a study of the people of Yarralin in Northern Territory. She writes that Law can be characterized in terms of four principles: *balance, symmetry*, *autonomy* and *response. Balance* must be achieved between competing interests or opposing forces, all of which must be treated as *symmetric* in the sense of equal in respect of moral considerability, with none being regarded as in any sense less than or properly subservient to others. Each party must, in other words, be treated as 'boss for itself', as an entity endowed with *autonomous* agency. All such agencies are required to acknowledge and adapt to the wider fields of agency that surround them by way of continuous two-way, or *responsive*, communication. When these four principles – which effectively revolve around the axis of balance – are observed, Rose notes, *sustaining relationships* are preserved – between people and people, people and other species, species and species, species and country, country and country. The cosmos, as governed by Law, is a moral order, in the sense that every being, whether human or non-human, has its own will, and can hence choose whether or not to play its part in keeping the system of relationships knitted up. To disregard Law is to allow the cosmos to unravel (Rose 1992).

Black emphasizes that Law is learned only through agentic engagement with one's own environment rather than via the detached-observer stance of the Western scientist or via the texts to which the theoretical results of the scientific exercise are committed. Via such agentic engagement, which is described by Senior Law Man Mowaljarlai, as "walking the land", one becomes immersed in the push and pull of vital negotiations. In consequence, one may begin to experience the land's responsiveness.

Whilst neither Mowaljarlai nor Black explain the forms that such responsiveness might take, a hint is provided by Frans Hoogland, associate of Senior Lawman, Paddy Roe of the Kimberley, and initiated Lawman himself. Hoogland speaks of a *feeling*, which might perhaps be understood as a sense of the environment yielding to attuned impulses or endeavors and resisting unattuned ones (Sinatra and Murphy 1999). If I understand Hoogland aright, this may be a matter of the world around one now subtly opening to one's advances, now subtly closing, as one thrusts and parries with and against circumstances. None of this, if it occurs, can leave one unmoved: the discovery of Law is indeed accompanied by feeling, not only in the sense that it is guided by intuitive, body-based awareness but also in a more affective sense: one leans into the openings and, in face of resistances, adjusts one's behaviour, simply because it feels right, affectively speaking, to do so. It feels right to find oneself in the groove – to find oneself slipping into a yielding flow of circumstances; equally, one is discomfited to find oneself pushing against those circumstances. In time one may so develop this faculty of awareness that it informs one's daily dealings. Which path should one take on country? With whom should one associate on country? How should one comport oneself on country? One's feeling for country may be a clue to Law, guiding one's steps, one's choices, in the midst of the most minute of particulars.

In the Kimberley, as Hoogland explains, there is a term for such sensitivity to the communicativity of country: *liyan* (Sinatra and Murphy 1999). *Liyan* is described more generally as the well-being that radiates from the core of one's being when all one's relationships – with country, community, culture and oneself – are in balance (Yu and Yap 2016). Because acting Lawfully is not acting out of 'conscience' or 'duty' but out of feeling in this way, Law is self-validating and self-enforcing. It is not, as Western law is, a set of rules or conventions imposed on us from without and designed to thwart our will or restrain our inclination. It is rather, once we have developed a feeling for it, coincident with our deepest will.

It is also crucial to the understanding of Law, as both Black and Rose note, that the cosmos which Law holds together is a psychophysical one, in which everything – each of the Ten Thousand Things – has a will of its own and is free to follow or deviate from Law. Things generally choose to follow rather than deviate because, as just noted, it feels right to follow – partly on account of one's desires having co-evolved with the desires of the myriad beings that surround one, and partly on account of the feeling of quiet composure that accompanies comportment sensitized to larger patterns of accommodation. Law then is not, as the Senior Law Men whom Black consults emphasize, the blind logic of cause and effect that governs a mechanical universe a la Newton and his successors in

physics, but a norm that animates a living cosmos and ensures its ongoing aliveness (Mathews 2019).

If Law is understood, following both Black and Rose, as prescribing an order of inter-relationships in which all things strive for self-actualization via mutual accommodation in the interests of achieving an overall balance, then Law shares a distinct affinity with the category of nature, as earlier intensionally defined. According to this definition, we may recall, nature was viewed not in extensional terms, as a set of (natural) things, but rather in terms of the twin principles of conativity and accommodation/least resistance. For when everything acts both from its own will-to-persevere-in-existence (conativity) and from a simultaneous inclination to synchronize its existence with the existences of proximate others (via accommodation rather than resistance), then all things come into balance. And if nature in this intensional sense is the proper object of conservation, as I earlier suggested, and nature so understood is the domain of Law, then perhaps Law may likewise be said to be in some sense the goal or province of conservation.

If this is agreed, then lands still 'managed', either actively or by default, in accordance with Aboriginal Law – let us call these Lawlands – would be the prime and proper object of conservation. These lands are often the same lands that were previously, and sometimes still are, designated wildernesses.[7] To see Lawlands as the prime and proper object of conservation is to imply that they set the bar for conservation. That is, it is not to imply that only Aboriginal lands should be conserved, though it does place a very high premium on the protection of these lands. Rather it sets as a new goal for conservation that all lands and waters should as far as possible be restored to a condition of Lawfulness.

While, as a goal, this entails that existing Lawlands should be rigorously protected, in collaboration with Traditional Owners and in accordance with local Indigenous articulations of Law, it also posits Lawfulness as the measure of conservation or restoration success in environments that have been degraded or destroyed or perhaps never inhabited by humans at all. Law then is posited as an ultimate compass to guide our conservation efforts. To restore lands and waters to a condition of Lawfulness is not necessarily to be solely beholden to historical baselines. It is rather to attempt to reinstate the kinds of patterns of mutual accommodation and adaptation, and hence of ecological functionality, that characterized traditional Lawlands.

To require that existing Lawlands, once incorporated into contemporary conservation estates, be managed wherever possible in collaboration with Traditional Owners, in accordance not only with conservation science but also with local articulations of Law, is no small order. Indeed, it is a very large order, but one that perhaps cannot be refused, despite the fact that it is likely further to

[7] A recent report shows that 70 per cent of the planet's remaining 'wilderness' areas occur in just five countries: Australia, USA, Canada, Brazil and Russia, all of which include extensive Indigenous homelands (Watson et al 2018).

stretch already strained conservation budgets. It would require of conservation scientists that they relinquish their exclusive status as experts and be prepared to re-learn conservation from the perspectives of Aboriginal tradition (Pascoe 2014; Lucashenko 2015; Stanner 1953). This would entail not only striving to bridge the huge onto-epistemic gulf between Western and Aboriginal systems of thought, but also revising and rewriting conservation policy in light of always locally specific Aboriginal Law. A degree of enculturation of conservation scientists and policy makers into Aboriginal thought would be required to achieve this outcome. But instruction in Aboriginal Law can really only take place *in situ* rather than in centralized educational facilities such as universities, since Aboriginal epistemologies are, as we have noted, not only local but essentially experiential: Aboriginal knowledge is acquired in dialogue with country (Black 2011; Emmanouil 2016). Such knowledge can also only be fully transmitted in relevant Aboriginal languages, since many of the descriptive and conceptual resources of those languages, particularly in relation to environmental matters, cannot be adequately translated into English (Bradley 2017; Wooltoorton and Collard 2017).

This latter point is the gist of the discourse of biocultural diversity conservation, according to which the ecological specifics of particular environments are captured only in locally evolved languages. When those languages are lost or ignored as a result of Indigenous dispossession, the associated knowledge is likewise lost. Without the linguistic capacity adequately to identify the features of a particular environment, the capacity to 'manage' it competently disappears (Maffi 2001; Rossi 2013).

To expand the brief of conservation in this way, with all the epistemological adjustments that such an expansion implies, might prompt a revisioning, and partial reorganization, of Aboriginal communities as places of instruction – as educational centres in their own right, with new professional roles and social structures created within communities to service this need.

Recent research on Aboriginal land practices has, as noted earlier, emphasized the fact that in many cases the practices in question did not consist merely in foraging but included forms of land stewardship that actively promoted regeneration and increase of staple species. Such modes of stewardship were framed in accordance with Law, involving strategies, such as firing and selective harvesting, that created conditions conducive to the spontaneous increase of populations of target species, such as kangaroo and yam daisy, while nevertheless maintaining the overall ecological richness and biotic abundance of supporting environments (Gammage 2011; Pascoe 2014). Aboriginal land practices, in other words, rendered the land productive for humans without obstructing the conativity, and hence sovereignty, of other species: rather than subjugating those species, by, for example, domesticating them, such practices simply strategically changed the set of affordances available to them in specific

locations, thereby allowing the members of those species – still entirely wild – to make their own choices.[8]

This new awareness of the role of Aboriginal agency in curating the seemingly Edenic ecology that pre-dated European invasion leaves in no doubt the misguidedness of the assumption on which the wilderness movement was originally founded: that wildness, with the respect for the sovereignty of all species that an ethic of wildness implies, requires at least a relative absence of human intervention.

Respect for biocultural diversity as part of an ethos of conservation under the aspect of Law would allow not only for this re-integration of human agency into ecologies of regeneration but also for acknowledgment that *ceremony* is integral to conservation practice. The prospective transaction between conservationist and country qua Lawland is not ultimately one of manager and managed but a reciprocal one of collaboration, which requires opportunities for communicative exchange. Such communicative exchange has traditionally been transacted, in Aboriginal societies, by way of ceremony. New forms of ceremony, congruent with different cultural terms of reference, may need to be devised by non-Aboriginal conservationists, with advice perhaps from Traditional Owners as to appropriate protocols for arriving at such alternative modes of address.

Finally, to construe Law as the goal or province of conservation and to posit Lawlands as the proper object of conservation would be to restore to the heart of the movement a moral principle that applies as much to the person of the conservationist as to the lands or waters she seeks to protect: she herself is required to discover how to live in accordance with Law – how to live a life that, as Black puts it, "brings respect for difference, but strives for harmony"(p 44).[9] In this sense, re-construing the object of conservation in terms of Law restores the psychological 'hook' that was lost when the category of wilderness was backgrounded in favour of the purely externalized, extensional category of 'biodiversity' – the hook that offered to the prospective conservationist a vision of redemption at a personal level as well as in environmental affairs.

Indeed, when the object of conservation is defined in terms of Law, there is no inherent limit to the scope of the conservation project. Civilization itself could in principle ultimately be reconfigured in accordance with Law. In other words, where wilderness was necessarily envisaged, in light of its relative exclusion of the human, as in retreat before the inexorable march of civilization, the same logic does not apply to Lawlands: Law could become the normative foundation for an ecological civilization.

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8 There was, of course, variability in land practices across pre-colonial Australia. In some parts of the continent, practices closer to those more conventionally describable as agriculture may have occurred (Gerritsen 2008).

9 As my colleague, Indigenous Studies and Earth Law scholar, Nia Emmanouil, has memorably put the question in conversation: "How can I live as a legal person in this land?". Thanks to Nia too for recommending several key references, such as Black and Watson.

Since Black sees Law, in the sense of a normative logic of relationship, as key to many Indigenous legal systems around the world, from Native American to Maori to the Pueblo of New Mexico, the re-construal of conservation in terms of Law is likely to have application outside Australia. The manifestation of this Law, Black declares, "has as much diversity as the ecology of the earth itself" (p 16). Such a re-construal may thus find purchase in many, perhaps all, of the countries in which Indigenous homelands are still extensive and Indigenous knowledge still strong (or, as in the case of China, still resonant in tradition). It also perhaps represents one articulation of the relatively recently emerged Earth Jurisprudence movement, which seeks on a global scale to conjoin Western philosophies of ecocentrism with Indigenous epistemologies, ontologies and systems of law.[10]

Conclusion

By reconfiguring itself around the category of Law and Lawlands then, the conservation project might recover the inward appeal that inhered in the category of wilderness but was lost in the transition to the scientistic discourse of biodiversity. This inward appeal is arguably what gave conservation its early moral force and momentum: wilderness was understood intuitively by people to be not only 'out there' but in some sense also within themselves. It exerted a *call*. Whether the call was experienced as enticing or retrograde depended on many factors and varied from culture to culture, individual to individual. The wilderness preservation movement clearly gave expression and purpose to those deeply touched by the call.

Many of the later critiques of the category of wilderness, particularly from environmental philosophers, took issue with this appeal to inwardness, disparaging it as an instance of anthropocentrism (Rodman 1982). Devotees were taken to task for valuing wilderness merely for the sake of its therapeutic benefits or recreational utility rather than on properly ecocentric grounds. To reconfigure conservation in terms of Law, however, and to re-construe its primary object as Lawlands, is to retain the inward call while unequivocally disentangling that call from mere anthropocentrism. At the same time, this reconfiguration categorically reverses the colonialist exclusion on which the category of wilderness was inadvertently founded, tying the conservation project back indissolubly to the Indigenous cause. When Indigenous Law is so placed at the core of the moral and juridical project of conservation moreover, the legality – and hence sovereignty - of Indigenous societies is implicitly acknowledged (Borrows 2018). Indigenising conservation in this way then might be a thread that pulls Aboriginal consciousness into the heart of the non-Aboriginal Weltanschauung, thereby beginning a process of mutual accommodation between Indigenous and non-Indigenous that might result, one day, in a polity of respectful and dynamic balance – a polity that would itself accord with Law.

[10] For an introduction to Earth Jurisprudence, see Australian Earth Laws Alliance website.

Indeed, the inward call exerted by Law may turn out to be more dramatic and redemptive than the call of wilderness ever was. I shall leave the last word to Indigenous legal scholar, Irene Watson.

> Today in the modern world the will to live in a place of lawfulness is lost to the greater humanity. Evidence of this is found in the growing list of global crises, poverty, environmental disasters, famine, war, and violence. What the greater humanity have come to know as law is a complex maze of rules and regulations; the body of law is buried, barely breathing. Law came to us in a song, it was sung with the rising of the sun, law was sung in the walking of the mother earth, law inhered in all things, law is alive, it lives in all things . . . Law was not imposed, and those who lived outside the law did just that, they were in exile from the law. We could say the greater proportion of humanity now lives in exile from the law (Watson, 2000 p. 4).

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