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Rethinking rewilding: A response to Jørgensen

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Abstract

In this article we respond to and challenge Jørgensen's criticisms of the concept of rewilding in her paper 'Rethinking rewilding', published this year in *Geoforum* (Jørgensen, 2015). Jørgensen argues that 'rewilding' has become a 'plastic word', one that has been stretched to the point where it lacks definitional precision, at risk of becoming 'the go-to blanket solution to environmental problems' (Jørgensen, 2015, p. 486). She also argues that the practice of rewilding is premised upon the dissociation of humans from the rest of nature and reproduces anti-human Nature-Culture binaries, rightly lambasted by critics of wilderness narratives in conservation practice. In response to these criticisms we challenge Jørgensen on two points. Firstly we argue that the problems of 'plasticity' and definitional imprecision can be rectified by highlighting and foregrounding the quality that we believe is at the core of all rewilding definitions and efforts: non-human autonomy. Secondly, we challenge Jørgensen's broad claim that sees the collapse of 'rewilding' into anti-human wilderness management. We do so by reflecting on two points; the dynamic human-non-human entanglements embedded within rewilding practice(s) and by arguing for rewilding as a 'wild experiment'. We make these points through the examination of two actually existing examples of rewilding.

Introduction

Dolly Jørgensen's article 'rethinking rewilding' (Jørgensen, 2015), arrives during a fertile period of time for those with a scholarly or applied interest in the direction of human/non-human relations in general, and environmental conservation in particular. Given the emergence of rewilding within both conservation and popular discourse, now is a good time for critical social scientists and humanities scholars to join the debate on the future of this strategy of ecological restoration, and so we welcome Jørgensen's intervention.

Over the majority of the paper, Jørgensen outlines six main ways in which the term 'rewilding' has been defined within the extant literature, before offering a critique of the term along two lines of reasoning. Firstly, Jørgensen argues that during its relatively short time of existence, 'rewilding' has become a 'plastic word' that has been stretched to the point where it lacks definitional precision, and is at risk of becoming 'the go-to blanket solution to environmental problems' (Jørgensen, 2015, p. 486). Secondly, she argues that the practice of rewilding is premised upon the dissociation of humans from the rest of nature: 'Rewilding as currently practiced disavows human history and finds value only in historical ecologies prior to human habitation. The rewilding concept has been deployed in a myriad of ways to exclude humans in time and space from nature' (*ibid*: p. 487). Jørgensen thus conceptualises rewilding as a practice that essentially reproduces the aims of wilderness management, which, of course, has received much criticism from environmental historians (most notably William Cronon). Jørgensen then states that 'rewilders apparently have failed to notice' such criticisms of wilderness (*ibid*).

Despite these criticisms, Jørgensen ends her paper by giving tentative support to the idea of rewilding, so long as rewilders reconsider the assumed exclusion of human 'intrusion' within spaces of rewilding. As a way of illustrating what this might look like, Jørgensen describes an exhibition held in 2014 at the Museum of Vancouver entitled 'Rewilding Vancouver', which envisions the coexistence of humans and wild animals within the city's future, through multimedia displays: 'Rewilding in 'Rewilding Vancouver' is about inclusion rather than exclusion - both humans and nonhumans co-exist and co-inhabitat [sic] the same space' (2015: p. 487).

In this article, we want to respond to both of Jørgensen's criticisms of the concept of rewilding. We firstly argue that the problems of definitional imprecision can be rectified by highlighting and foregrounding the quality that we believe is at the core of all rewilding definitions and efforts: non-human autonomy. Secondly, we challenge Jørgensen's broad claim that sees the collapse of 'rewilding' into anti-human wilderness management; we do so by reflecting on non-human autonomy in relation to some actually existing case examples of rewilding.

Rewilding and autonomy

In Jørgensen's (2015) paper, she usefully outlines the different ways in which the term 'rewilding' has been used within the scientific academic literature to date. Through Web of Science and Google Scholar searches, Jørgensen identified 49 academic articles (up to 2013) that explicitly refer to 'rewilding'; from this she extrapolated that there has been six different uses of the term: 1) cores, corridors, carnivores; 2) Pleistocene mega-fauna replacement; 3) island taxon replacement; 4) landscape through species reintroduction; 5) productive land abandonment; and 6) releasing captive-bred animals into the wild. Following an overview of what each of these six categories constitute, Jørgensen (2015) voices concern that 'to apply a single word to such a broad range of activities could potentially lead to confusion' (2015, p. 485).

Jørgensen then turns to outline the uptake of 'rewilding' outside of academia. Here, she states that, as it has moved from 'scientific' to 'activist' discourse, the term has been 'shaped...into something different' (Jørgensen, 2015, p. 485). As an example of this, Jørgensen points to the non-profit organization Rewilding Europe, and their efforts to reintroduce predominantly charismatic mammalian and avian species to former agricultural land: 'Rewilding Europe thus combines two definitions of rewilding: productive land abandonment with species reintroduction' (Jørgensen, 2015, p. 486).

As a result of the integration of different modes of 'rewilding' within a given project - or more broadly within 'activist' discourse - Jørgensen argues that it has become a 'plastic word', which are 'words developed in scientific language for discrete ideas that then move into daily use and take on different meanings according to the context' (Jørgensen, 2015, p. 485). For Jørgensen, this means that the term has now lost its precise meaning, and has become 'vague' and 'fuzzy' (2015: p. 486). While we remain unconvinced that the combination of rewilding definitions amounts to 'plasticity', rather than reinforcing what activities constitute rewilding, we nonetheless want to constructively respond to the more general point made by Jørgensen that 'just as Shakespeare's Macbeth laments about life, rewilding becomes a word 'full of sound and fury, signifying nothing'- or perhaps, signifying everything' (Jørgensen, 2015, p. 486).

Rather than deduce the meaning of rewilding through a genealogical account of rewilding practices (both real and potential), we understand rewilding to be: ‘a process of (re)introducing or restoring wild organisms and/or ecological processes to ecosystems where such organisms and processes are either missing or are ‘dysfunctional’ (Brady and Prior, forthcoming, p. 5). This definition is broad enough to account for the six types of rewilding identified by Jørgensen, and is inclusive of rewilding efforts at different scales and also different sites; attempts to rewild in urbanised places, for instance, would be included. At the same time, it is specific enough to delineate what these various activities are trying to achieve: the restoration of wild organisms and processes.¹ In turn, we follow Woods’ eloquent account of ‘wildness’, which he takes to mean: ‘the autonomy of the more-than-human world where events, such as animals moving about, plants growing, and rocks falling occur largely because of their own internal self-expression’ (Woods, 2005, p. 177). It is this idea of more-than-human autonomy that we feel addresses Jørgensen’s concern that ‘rewilding’ has become a ‘plastic’ word ‘signifying everything’.

Firstly, ‘autonomy’ sets rewilding apart from other forms of ecological restoration practices. Non-rewilding ecological restoration is sustained by human stewardship through adaptive management and post-restoration maintenance interventions (Clewell, 2000; Galbraith-Kent and Handel, 2007; Thom, 2000). By contrast, while of course human actors may initiate rewilding efforts, the restoration of autonomous biotic and abiotic agents and processes is realised through the (oftentimes gradual) relinquishment of direct human management of the wild organisms or ecological processes in question. This occurs, for example, when animals are ‘de-domesticated’, resulting in wild animals that do not rely on humans for their survival (Gamborg *et al.*, 2010), or when woodland management practices (pruning, coppicing, uprooting fallen trees, removing dead matter) are eschewed or rescinded over time once floral species have been reintroduced, even if this goes against a preservationist ethic of maintaining a population of organisms at a particular level, or an ecosystem in some idealised form (Brady and Prior, forthcoming).

¹ The latter includes the restoration of disturbance regimes, such as fire in grassland ecosystems (Fuhlendorf *et al.*, 2008).

² In a report produced by Scottish Natural Heritage, the beavers are referred to as ‘free living’ (Campbell-Palmer *et al.*, 2015), which chimes with the concept of ‘self-sustaining’.

As such, rewilding - unlike other restoration practices - foregrounds the *self-sustaining* qualities of non-human Nature; this can be generalised across landscapes (where it is sometimes referred to as 'self-willed' land), but 'self-sustaining' is equally applicable to individual species, as with the establishment of beavers in Tayside, Scotland, whose population has reached at least 150 individuals within a range composed of different land uses, including intensive lowland agricultural areas, without direct human management (Tayside Beaver Study Group, 2015).²

Secondly and relatedly, it is this autonomy that threads together the different versions of 'rewilding' to be found in the extant literature. Indeed, non-human autonomy is central to each of the six uses of 'rewilding' identified by Jørgensen, as well as other types of rewilding that do not fit neatly within these categories, such as the removal of dams and other hard engineering within river systems (Hawley, 2011), as well as calls for the rewilding of the seas (Monbiot, 2013). Far from being a 'plastic' word then, we believe that the identification of non-human autonomy as being central to 'rewilding' brings external (in relation to other forms of ecological restoration) and internal (in relation to other forms of rewilding) coherency and clarity to the term as both a theory and set of related practices.

Rewilding, wilderness and making recourse to Nature

The second point we make is that (mostly European) rewilding practices do not reproduce the aims of wilderness management, or indeed seek to construct imaginary cathedrals to Nature. Instead the examples we present are developed on the premise that future conservation landscapes will be co-habituated and co-shaped by humans and non-humans. So whilst Jørgensen (2015, p. 487) claims 'rewilders want to create a wild without people and are oblivious to the problematic nature of the wilderness construct...', we challenge this broad claim that equates 'rewilding' initiatives with a 'radically exclusionary approach' (*ibid*) seeking to reconstruct a mythical, and fundamentally flawed Nature-Culture binary (most often embedded within the aims of wilderness management).

² In a report produced by Scottish Natural Heritage, the beavers are referred to as 'free living' (Campbell-Palmer *et al.*, 2015), which chimes with the concept of 'self-sustaining'.

On the contrary, we argue, actually existing examples of rewilding acknowledge the implicit entanglement of non-humans and humans in conservation endeavours, and celebrate non-human autonomy in rewilding as fundamental to the creation of experimental, forward looking conservation futures. To make this point we reflect on two existing examples of rewilding that both begin with the premise that humans and non-humans co-exist and co-inhabit the same space; a premise which allows ecological processes to flourish and surprise as initiatives evolve.

The first initiative to exemplify this point is the Scottish Beaver Trial (SBT). The SBT involved the release of three families of Eurasian beavers (*Castor fiber*), into three separate freshwater lochs within the Knapdale Forest, in the west of Scotland, in 2009. This would be the first time these animals had appeared in 'the wild' since they were hunted to extinction 400 to 500 years ago. Whilst not self-labelled as a 'rewilding project', the results of the SBT will act as a forerunner for the rewilding of beavers within the rest of the UK. Whilst on first glance the SBT may appear to make recourse to a Nature that is separate from humans, a closer interrogation reveals the extent to which projects like the SBT envision futures where humans and non-humans co-exist and co-fabricate the landscape.

To be sure, the SBT was developed on the premise that humans and beavers would have to co-exist in the area of mid-Argyll if the trial was to be a success. This premise was deliberated and detailed in three public consultations, which took place in 1998, 2000, and 2007-implicating humans (and the autonomy of non-humans) in the development and success of the Trial from the start (Jones and Campell-Palmer, 2014). The final consultation resulted in the application of a license from the Scottish government to reintroduce beavers, an application which itself required the involvement of local community and other stakeholders in the development and implementation of the Trial. The extensive human labour that went into this process, and the continuing importance of community involvement, should not be discounted as lip service to popular participatory approaches, but instead highlights the point that rewilding initiatives in this vein are built on the premise that humans and non-humans are inextricably linked, and the time and energy put into consultancy work makes most humans, particularly local communities, well-aware that they themselves are intimately tied to ecosystems, rather than excluded from them.

We have already argued that a definition of rewilding should be foregrounded in non-human autonomy. In the SBT this autonomy is most readily illuminated in the documented risks that the introduction of beavers create; which include the beavers potential to fell trees and build dams, – all which have assumedly deleterious affects on the worked landscape of Knapdale (forestry and agriculture³) as well as on historic monuments and flood defense regimes. It is worth noting here that it is the risks identified by the SBT stem from the beaver's autonomous actions; a point that illustrates that beavers are being expected from the outset to co-exist and co-fabricate the landscape along with humans. The affects noted above are currently being managed through a variety of approaches; however one example in particular is pertinent to illustrate the second argument we make. In 2009, a local landowner reported to Scottish National Heritage that 20 small to medium-sized trees had been felled on their land 3.5km north of the Trial area, and upon inspection beavers were observed by the SBT in close proximity to the property. The SBT licensing agreement states that the SBT must 'ensure that local businesses and properties have a clear route to pursue compensation claims for damage caused by the beavers during the period of the Trial', and so insurance cover and a dedicated compensatory budget was put in place. In this case, 100 replacement willow saplings were planted as a form of compensation. Far from exposing an initiative that seeks to cleave nature and society, this example highlights the expected entanglements of human and non-human life during the Trial. In the licensing agreement these entanglements have been identified, mitigated for and arguably celebrated, in an effort to afford some level of autonomy to beavers during the Trial.

Contrary to Jørgensen's claim then, in this example of rewilding the SBT have been earnestly and laboriously aware that humans are intimately tied to ecosystems, rather than cleaved from them, and have sought to develop strategies which still allow for a certain amount of beaver autonomy within this context. In addition, much of the case for the reintroduction of the beavers in Knapdale was premised on the argument that rewilded beavers would be a vehicle for eco-tourism and environmental education. These opportunities, for public(s) to see

³ Reinforcing the point that this is not a 'wilderness' landscape, but instead one that is highly managed; which can nonetheless still accommodate wild beavers.

(or at least track⁴) beavers, also undermines any argument to say that rewilding distances humans from non-humans.

The second example we draw on to illustrate that rewilding does not reproduce the aims of anti-human wilderness management (Jørgensen, 2015, p. 487), is the Oostvaardersplassen Reserve (OVP) in the Netherlands, which Jørgensen briefly cites in her article. Making our second challenge to Jørgensen here we argue that the OVP is an experimental site unashamedly created through human and non-human entanglements. Rather than make recourse to wilderness, rewilding sites exemplified by Oostvaardersplassen allow for the co-production of surprising ecological futures.

The OVP, arguably the forerunner of the European rewilding movement, is an ‘experimental’ nature reserve contained within an area of reclaimed sea-land, just a few miles north-east of Amsterdam. The reclaimed polder was initially marked out as an industrial development site, but was gradually colonised by greylag geese as development plans fell through. Since the geese acquired the site (non-human agency is important in the evolution of OVP), successfully lobbying (by their human counterparts) secured its demarcation as an official nature reserve. Subsequent to this, the land was further diversified and de-domesticated; and 35 Heck Cattle were introduced to the reserve in 1983, followed by a number of Red Deer in 1992. These reintroductions were led by the efforts of Frans Vera, an ecologist at the heart of experimental rewilding at Oostvaardersplassen who proposed that pre-human European landscapes were predominantly open-wood pasture grazed by large herbivores rather than a closed climatic forest previously proposed by eminent paleoecologists (Vera 2000). The initial colonisation and intensive grazing of the polder by greylag geese created an ‘accidental ecology’ (Lorimer and Dressen, 2013), which was well suited to other migratory birds. It was this accidental ecology that led Vera to use Oostvaardersplassen as an experiment in environmental governance, initially developed to test Vera’s hypothesis in practice. This space then is certainly not one that equates to anti-human wilderness management but instead to what Lorimer and Dressen term a ‘wild experiment’ (2013, p. 1-3). Whilst such experiments do

⁴ It is readily acknowledged by the SBT that the autonomous qualities of the beavers (as well as their crepuscular nature) make them difficult to spot in the landscape. Consequently the SBT also encourages visitors to engage with the tracks and traces of these non-human animals.

afford (particular) non-humans a certain amount of autonomy, they do not cleave humans from Nature (or vice versa), instead they offer the opportunity to create unique, and ecologically surprising hybrid landscapes. Whilst we readily acknowledge that this bestowed autonomy can be fragile, non-humans, and the ecological processes they are embedded within are allowed the potential to live, interact (and die) in ways which have created a hybrid landscape, one co-inhabited, co-produced and co-fabricated in ways which do not make recourse to a singular Nature.

Conclusions

While we welcome Jørgensen's intervention on 'rewilding', we have responded to her article on two fronts. Firstly, we have questioned her observation that rewilding has become a 'plastic' word. We believe that the identification of non-human autonomy as central to 'rewilding' brings external (in relation to other forms of ecological restoration) and internal (in relation to other forms of rewilding) coherency and clarity to the term, as both a theory and set of related practices. Secondly, we have challenged Jørgensen's claims that rewilding initiatives reproduce a call to return to a pre-human pristine Nature, as is a common criticism of wilderness management. Instead we provide two existing examples that reflect the hopeful imaginary Jørgensen's sees in the 'Rewilding Vancouver' exhibition. These two examples show that actually existing rewilding initiatives have been developed and governed within the understanding that human and non-human world are inextricably entangled. These entanglements are in some cases celebrated, and the autonomy afforded to non-humans in such cases makes for an open-ended, ecologically surprising future; one which does not make recourse to a singular Nature.

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