

Practices of Coordination in a Conservation–Tourism Partnership in South Africa

Wisse Van Engelen^{1,2} ,
Annet Pauwelussen³ ,
and Esther Turnhout¹ 

Science, Technology, & Human Values
1–30

© The Author(s) 2025



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/01622439251322532

journals.sagepub.com/home/sth



Abstract

Conservation–tourism partnerships are often promoted as win–win solutions to the twin problems of underfunded conservation and unsustainable development. Critics on the other hand have warned about the tendency toward win–lose outcomes, when nature is reduced to a tourism commodity. This article intervenes in this debate by contributing to a scholarship in Science and Technology Studies on ontological multiplicity. We present an ethnographic case study of a nature park in South Africa that analyzes its partnership and its outcomes as emerging from situated and messy political

¹ Department of Technology, Policy and Society, University of Twente, Enschede, The Netherlands

² Department of Social and Cultural Anthropology, University of Cologne, Cologne, Germany

³ Environmental Policy Group, Wageningen University & Research, Wageningen, The Netherlands

Corresponding Author:

Wisse Van Engelen, Department of Technology, Policy and Society, University of Twente, 7500 AE Enschede, The Netherlands; Department of Social and Cultural Anthropology, University of Cologne, 50923 Cologne, Germany.

Email: wissevanengelen@gmail.com >wissevanengelen@gmail.com

dynamics. Our findings demonstrate the ontological politics taking place in the interactions between two enacted versions of the park: a tourism version and a conservation version. We show how in some cases one version comes to matter over the other and also how the outcomes of these ontological politics are not total. In doing so, our analysis furthers the study of ontological multiplicity of natural places by going beyond the mapping of multiplicity, to also explicitly consider power relations. Focusing on the work of coordination, we challenge both win–win and win–lose accounts of conservation–tourism partnerships, revealing possibilities for doing partnerships otherwise. We also make the argument for expanding these possibilities through a move toward “response-able” tourism.

Keywords

conservation–tourism partnerships, nature parks, ecotourism, ontological multiplicity, ontological politics, South Africa

Introduction

This article is about a nature park. Specifically, it is about a South African nature park that is both a protected area and a tourism destination. The nature park—which we will simply call The Park for reasons of anonymity—consists of privately owned land incorporated into a national park that combines conservation with tourism in its mandate. In The Park, we find not only a conservation team, but also a tourism operator. Together, they operate under the agreement that the conservation team will perform conservation management that is “conducive to a high-quality wildlife tourism product” and the tourism operator will conduct only activities that “comply with all Park Rules and Park Regulations and codes of conduct.”¹ Furthermore, for the conservation team, there is an incentive to take tourism into consideration, as the financial contribution from tourism to conservation increases with increasing occupancy at the tourism lodge.

In this nature park, like in so many others around the world, we find that conservation and tourism are closely connected in the form of a partnership. Such a partnership is considered capable of combining tourism-funded stewardship of protected areas with sustainable, high-quality tourist experiences. These conservation–tourism partnerships are, therefore, promoted as a win–win solution to the twin problems of underfunded conservation and environmentally destructive development in nature parks across the globe (CBD 2014; Leung et al. 2018; Anna Spenceley, Snyman, and Eagles 2017;

Worboys, Lockwood, and De Lacy 2005). Yet, despite this win–win rhetoric, conservation–tourism partnerships are fraught with tensions. These are commonly described as the adverse environmental impacts of tourism which may undermine conservation efforts (KC 2021; Buckley 2004; Sumanapala and Wolf 2019), or, conversely, as the negative effects of conservation interventions on tourist experiences (Buijs, Elands, and Van Marwijk 2012; Elands and Van Marwijk 2008). In The Park, for example, large machinery is needed for certain conservation operations, yet they are unattractive sights for tourists. As another example, off-road driving makes it likelier for tourists to sight animals, yet it disturbs soil, plant, and animal life. These tensions are commonly addressed through visitor management and other planning tools, which are usually described in terms of rational and practical execution, while the partnership itself is still presented as a win–win (see Leung et al. 2018; Spenceley et al. 2015).

In a more critical evaluation, differences between tourism and conservation are considered as fundamental contradictions rather than tensions, which negate the possibility of equal partnerships or win–win solutions (Duffy 2015; Fletcher and Neves 2012).² In this perspective, tourism is one of the ways in which nature is subjected to capitalist market dynamics, and reduced to a commodity that is sold to those with money (Büscher et al. 2012; West and Carrier 2004). Situating conservation–tourism partnerships in the larger context of neoliberalism, this explanation states that conservation–tourism partnerships are ultimately corrupt since the overriding concern is the accumulation of capital, not conservation. Rather than a win–win solution, this perspective argues that these partnerships present a win–lose situation, where nature comes to serve the tourism economy.

However, when we look at the case of The Park, relations between tourism and conservation are much messier than that the win–win and win–lose accounts suggest. We argue that this discrepancy originates from a prevalent conceptualization of power as centered in a single source. Win–win accounts locate the source of power in the park management authority and the rules it sets, while ignoring how tourism operators and other actors “allow rules to regulate” (Verzijl and Dominguez 2015, 112). Win–lose analyses, on the other hand, locate the source of power in capitalist structures (Carpenter 2020) and how these shape what is seen as rational, effective, and efficient, paying less attention to other—social, cultural, and environmental—forces and the role of management (Lippert, Krause, and Hartmann 2015). Both pay little attention to how nature parks are shaped in situated practices.

The importance of situated practices in understanding power relations as emergent outcomes has been a key feature in scholarship in several fields of study, including poststructuralism, feminism, and STS. Specifically about the topic of conservation and tourism, Duffy and Moore (2010) point out that elephant-back tourism, conceptualized as a driver of the neoliberalization of nature, is not hegemonic but *hybridizes* with existing context-specific forces. Elephant-back tourism takes shape differently in different places, and has both positive and negative effects. In some cases, elephant-back tourism may displace or change conservation, but in others, it may not, or not completely.³ Similar to this analysis of hybridization, Van der Duim, Ampumuza and Ahebwa (2014, 597) show that the lives of gorillas in the Bwindi Forest National Park in Uganda are shaped by both conservation and tourism (among other factors), and that the boundaries between conservation and tourism are “constantly overflowed, blurred, and renegotiated, leading to complicated relations of power between and within these networks.” These case studies suggest that no clear win–win or win–lose evaluation applies to conservation–tourism relations.

Along similar lines, in this article, we are interested in the hybridization of forces to make sense of the messy power relations we observed in The Park’s conservation–tourism partnership. The notion of hybridization recognizes power not as a centered force, but as operating through multiple and situated relations. We take inspiration from relational perspectives on power which highlight that:

rather than looking for the single form or the central point from which all forms of power derive, either by way of consequence or development, we must begin by letting them operate in their multiplicity, their differences, their specificity, and their reversibility; we must therefore study them as relations of force that intersect, refer to one another, converge, or, on the contrary, come into conflict and seek to negate one another. (Foucault 2004, 205–206, as cited in Hinchliffe and Bingham 2008)

Actor-network theorists have similarly suggested that power relations are not fixed, and neither are the orders or structures they produce and are the product of; they are practiced *orderings* (Law 1993). With this understanding, we go beyond the one-dimensional conceptualization of power as exercised and resisted, and analyze how power relations are the outcome of different agendas and agencies (Latour 1984). We bring attention to different situations and events where power relations emerge and are acted upon.

Such an analysis has the potential to complement analyses that point out the unjust structures within which nature parks and conservation–tourism relations are formed, including capitalism, (neo)colonialism, and green imperialism (Moore 2020), by illuminating complexity and messiness in different settings and by revealing possibilities for doing things otherwise (Mol and Law 2002; Law 2004).

To understand the intersections between the forces of conservation and tourism, we follow the suggestion from Ren (2021) which says not to define conservation and tourism entities beforehand, nor frame them as antagonist, but instead explore how they—and the boundaries between them—are shaped through their intra-actions.⁴ This means that to understand the outcomes of the conservation–tourism partnership, we need to go beyond considering formal contractual agreements and money flows, to examine the multiple sites of intra-actions between tourism and conservation, and to analyze where and by whom differences between the two are mobilized, appraised, and negotiated (see also Lippert, Krause and Hartmann 2015). We do this by zooming in on (1) the conservation and tourism practices that enact *The Park*; (2) the ways these practices intersect; and (3) the power relations that emerge at these intersections. As we discuss in more detail later, we will use a praxio/valuographic approach to demonstrate both what is made to be important and what tends to be actively neglected in practice—in conservation, in tourism, and their various entangled states.

With this approach, we contribute to a growing body of STS and related literature that has similarly approached natural places through the lens of multiplicity (Mansfield et al. 2015; Nustad 2011; Middelveld, Van der Duim and Lie 2015; Van der Duim, Ampumuza and Ahebwa 2014; Lorimer and Driessen 2013; Watson 2003; Van Dam et al. 2024). Although many of these studies end at the point where multiplicity, alignment, and friction are identified and mapped, we explicitly focus on the power relations in intersecting conservation and tourism practices. We do this by reappraising the notion of coordination given by Mol (2002): the mechanism through which the coexistence of multiple forces and concomitant realities is achieved.

We begin by presenting some of our empirical material to describe and illustrate our theoretical approach. We then describe our study site and methodological approach, and present our analysis. Afterward, we argue for a move toward “response-able” tourism that expands the possibilities of doing conservation–tourism partnerships otherwise. Finally, we discuss our findings and provide a theoretical reflection.

Understanding Multiplicity, Coordination, and Power in The Park

The Park's plains provide an illustration of how multiplicity is coordinated in the practices of tourism and conservation management. The plains are The Park's open areas where grasses—rather than trees—grow. These grasses are what distinguish the ecosystem as savanna bushveld, which is The Park's historical referent. Moreover, the grasses support a large and diverse population of grazers.⁵ The plains are thus a typical feature of the ecosystem that is to be conserved in The Park and they are of great importance to the conservation biologists who study, evaluate, and care for the ecosystem.

The values that conservation biologists attribute to the ecosystem are entangled with conservation biologists' practices (Friese 2015). They involve questions of how good the plains are, how they compare with past plains, and how good plains can be realized. Indeed, while grassy plains are good plains (if we may put it this simply), they require active conservation management, since it is by no means given that grasses are actually present on the plains. The state of the ecosystem is fragile and the plains are under constant threat of becoming woodland through an ecological process called "bush encroachment." Bush encroachment refers—so we read in *Veld Management: Principles and Practices*—to "the densification of undesirable local plants [that] outcompete valuable forage plants, and, in extreme cases, obstruct the movement of animals" (Van Oudtshoorn 2015, 81). One of the consequences of bush encroachment can be sheet erosion, where the soil hardens and water runs off instead of infiltrating and reaching roots. To prevent this, the conservation team digs small ponds—a practice referred to as "ponding"—where water can collect to facilitate grass growth (another intervention is wildlife population management, which we discuss later). In this instance of The Park as a conservation effort, the plains are not only evaluated, they are also actively valorized; good plains are realized in practice (Heuts and Mol 2013).

However, conservation is not the only way of enacting and valuing the plains. The plains are important for tourism too. They are essential to view wildlife, facilitated by guides driving around small groups of tourists in The Park in open-roof Land Cruisers. Together with the close-by river, the plains form the core game drive area of The Park. Many grazers gather here to feed, as do the predators that in turn feed on them. Besides attracting wildlife, the great feature of the plains that contributes to the quality of wildlife viewing is their openness. Most of The Park consists of

relatively thick vegetation, which obstructs the practice of wildlife viewing, as one of The Park's tourist guides said:

I mean, I'm gonna be honest, when [the vegetation] is thick, it's difficult to see animals. And then, as much as we try to focus on the smaller things, guests do still want to see animals. So areas like that, we don't really get into that much, because it's so thick.

Most of the guides, therefore, direct their game drives to the open plains that afford the wildlife viewing that attracts tourists to The Park. Here again, bush encroachment is a threat to the plains; but now, this refers not to the plains as *an object to be conserved*, but rather as *an object to attract tourists*. This is also reflected in *Veld Management*, which states that bush encroachment "furthermore decreases the aesthetic appeal of a property, resulting in reduced property values" (Van Oudtshoorn 2015, 81).

As we see, the plains are approached in different ways by conservation and tourism. And as indicated by the ponding and the decision of the tourist guide to direct his game drives away from thick areas and toward the plains, there is a material dimension to these approaches. Nature parks do not only come to matter in representational ways, they also literally come to matter as actors manipulate and intervene in their surroundings. While diverging perspectives can exist side by side quite peacefully, a material intervention in a nature park is difficult to ignore, as it directly touches upon the question of what the park *is* (Helford 1999). As such, we are interested in how differences between conservation and tourism play out not just in but also *through* The Park.

With this focus, we draw attention to the ontological politics of nature parks. In ontological politics, what is at stake is reality itself and concomitant ways of valuing this reality (Mol 1999, 2012). Is The Park an ecosystem that is valued for its health and biodiversity, or is it an attraction that is valued for its ability to entertain tourists? This is not just a matter of perspective because actors' practices rearrange relations that shape nature in The Park in specific ways. And since multiple practices exist that enact The Park, it follows that different versions of The Park are enacted too (Mol 2002).

Despite this ontological multiplicity, different versions of The Park are made to co-exist through the process of coordination. Coordination keeps The Park from fragmenting even if it is multiple. Different mechanisms are employed for this purpose, which do not lead to a harmonious coexistence but rather enact certain power relations. Our focus on coordination

highlights the workings of ontological–political dynamics that play out when versions meet, examining which versions of nature parks come to matter over others, and how they come to do so.

This use of Mol's notion of coordination expands actor-network theory to include not just productive but also suppressive forms of power.⁶ If we would employ an early actor-network theory approach focused on “the powers of association” (Latour 1984), we would say that through The Park's partnership agreement, the conservation team expands its network and becomes more powerful, as it becomes better able to implement its operations and shape The Park. However, a focus on coordination can bring to the fore the mutual dependencies between conservation and tourism and demonstrate how, despite neither enjoying complete power to shape The Park, specific versions of The Park can come to matter over others.⁷ As such, this approach is able to complement ethnographic understanding with the possibility of adopting critical standpoints (Puig de la Bellacasa 2011; Giraud 2019). And this, as we note in our concluding section, also offers the opportunity to connect studies of “ontological politics” that focus on multiplicity within dominant ontologies, with those of “political ontology” that foreground the struggle of Indigenous and non-Western ontologies against oppression by dominant ontologies (Bormpoudakis 2019).

Methodological Approach

Study Site

While we cannot write too much about The Park lest we spoil the anonymity of our research interlocutors and the company that some of them work for, it is important to recognize that the relations we study and analyze are embedded in a historical and political context of colonialism, racism, and capitalism, as is the case in many other national parks in South Africa and wider Sub-Saharan Africa.⁸ Guided by a colonial idea of wilderness, many of South Africa's national parks forced local people off their lands, and only allowed them to play a role as laborers employed by the parks (Carruthers 2009). As Musavengane and Leonard (2019) describe, many of these inequalities persist, and we observe this too in The Park.

Regarding its relation to the state, The Park is a contractual national park, which means that the government does not own the land but instead has a co-management agreement with The Park's landowners (Grossman and Holden 2009). By creating this contractual national park, the underfunded

state authority has been able to expand the land under its protection. The Park is situated next to a state-owned national park and it is legally and ecologically part of the latter. For example, all internal fences have been removed, leaving only an outer fence that encloses the complete national park. In terms of management, The Park's landowners—a small number of white entrepreneurs from South Africa, Europe, and the United States—have employed a number of trained conservation managers and instituted a conservation team. This team is responsible for most of The Park's management, with the exception of anti-poaching operations and wildlife population management interventions, which need to be conducted and approved, respectively, by the state authority.

Since national parks have a mandate to promote public recreation, wildlife tourism is actively promoted in The Park. Besides, income from tourism is required to cover the operating costs of The Park because the landowners only invest in The Park's capital and not its operation. This income is secured by granting concession rights to a luxury safari tourism operator which pays concession fees to the conservation team. This fee may range from 5 percent of the published rate for a night when occupancy at the lodge is below 50 percent, to 12.5 percent when occupancy is above 70 percent. The conservation of The Park, which requires rehabilitation and ongoing management, is therefore dependent on tourism. And vice versa, tourism is dependent on conservation because the tourism operator promotes a product oriented toward wildlife viewers and photographers, which cannot do without The Park's scenery and its wildlife populations, which includes the famous Big Five species.

The Park's conservation team and the tourism operator operate from two different offices in The Park and are mostly concerned with their own operations. While conflict is too strong a term, there are frequent tensions and disputes between the two; some tourist guides complain that restrictions set by the conservation team make it difficult to do their job, while members of the conservation team complain about tourist guides' semi-occasional misconduct. Illustrative of the relation is the question put by one of the conservation managers to the first author (who joined both the conservation team and tourist guides for fieldwork), about whose side he was on: with the conservationists or the tourists?

Nevertheless, the conservation and tourism managers work together, holding monthly meetings and coordinating their practices in various ways, as we show. In fact, we will even show that sometimes the conservation managers assist in enacting The Park as a tourist attraction, showing how an ontological politics lens focuses on practices and complicates an understanding of politics as happening between groups of people.

Fieldwork and Analysis

Our analysis of the conservation–tourism partnership draws on five weeks of ethnographic fieldwork in The Park, conducted in February and March 2020 by the first author. Central to the analysis is the notion of ontological multiplicity as described above, and a concurrent focus on practices. Our methodological approach can best be described as a praxiography (Mol 2002). This approach does not take its object of study—in this case, a nature park—at face value, but, instead, situates it in the relational networks that it shapes and that it is shaped by. As such, the praxiographer explores the practices that enact the nature park. Rather than asking research interlocutors what they know about the nature park, the praxiographer focuses on their practices of making the park “work” (as a conservation or tourism site, in this case), in order to bring out what knowledges are embedded in these practices.

As a starting point for our praxiography, we employed one of the strategies suggested by Bueger (2014) and *followed* The Park—as it flowed and materialized in different ways through the intra-actions between conservation and tourism. Our analytical units are the conservation and tourism networks and their respective enactments of The Park. We approached these two networks symmetrically using the same methods and terms to describe both, thereby avoiding ontologically siding with either one a priori (Callon 1984).

As part of the fieldwork, the first author joined the conservation team and the tourism operator in their activities. He participated in different conservation practices and joined game drives. He also conducted ten semi-structured interviews with members of the conservation team and with tourist guides, asking about practices and events that happened to them and in which they or others acted. Other materials included, among others, a conservation management handbook and a training manual from the Field Guide Association of Southern Africa (FGASA), in addition to the first author’s own prior experience of being trained and having worked for a short period as a field guide. He analyzed the generated insights—captured in field notes, transcribed interviews, or in photos or textual documents—in an iterative coding process before writing, and the authors jointly developed and refined these in the writing process itself. In the following three sections, we present our analysis. Each section discusses a practice that takes place in The Park and enacts The Park. These are: machine parking, wildlife population management, and bush clearing.

Machine Parking: On Distribution

Many conservation operations in The Park, like the ponding mentioned above, require the use of mechanical machines like tractors, excavators, bulldozers, mulchers, trucks, or other vehicles. Sometimes, tourism also needs to use large machines, which we consider later. While machines are considered necessary for conservation, their sounds and sights pose an issue for tourism as they are not the first thing tourists want to hear or see while on a game drive. As one guide explained taking the perspective of a tourist:

You've done your research. You go to that specific lodge in a bit of wilderness. And lovely. Such a good experience. You saw lions! And suddenly around the corner: BOOM! There's this big yellow machine. You know... It can make you think, if you put yourself in the guest's shoes...

When tourists come to visit The Park and expect wilderness but encounter a machine, it spoils their experience. Where and when the machines can be seen or heard is a small issue for conservation, but it becomes a matter of concern upon encountering tourists.⁹ Managing The Park as an “ecosystem to be conserved” by keeping the machines out in the field where tourists see them hampers the enactment of The Park as a “tourist experience.” Here, conservation’s enactment of The Park *interferes* with tourism’s version of The Park; it has the effect that The Park becomes less of a *tourist experience*.¹⁰ When different versions meet, new differences emerge; the Park is never fixed. A tourist experience or an ecosystem to be conserved are not stand-alone constructions that once built can persist by themselves. Rather, conservation and tourism practices come together at some points, as when the machines used for conservation operations are seen by tourists.

It is such “partial connections” (Strathern 1991) that typify the situation of multiplicity, and that necessitate careful coordination to prevent interferences that result in clashes between different versions. Coordination is what makes a situation of multiplicity last; it allows different versions to coexist. As for the machines, this coordination is performed when the conservation team—which according to the contractual agreement is supposed to perform management that is “conducive to a high-quality wildlife tourism product”¹¹—tries to avoid the confrontation between tourists and the noisy and unsightly aspects of conservation. For instance, they limit their operations to the hours when tourists are at the lodge and not out on game drives. And when the conservation team needs to work during those



Figure 1. At a national park in South Africa, a tractor with trailer used for conservation purposes is parked off the road, but is too big to drive completely out of sight of the tourists who visit the park for wildlife viewing.

Source: Photo taken by the first author, 2020.

hours as well, or when it leaves the machines in the field overnight to save fuel (see Figure 1), it always informs the lodge managers when and where exactly it will be doing the work, or where the machines are parked, so that the guides can avoid them when planning the routes for their game drives. The Park is a “tourist experience” from roughly 06:00 till 10:00 in the morning, when the tourists are out on their first game drive; an “ecosystem to be conserved” from 10:00 till 16:00 in the afternoon, when tourists are at the lodge and the conservation team goes out to work; and a “tourist experience” again from 16:00 till 19:00 in the evening, when the tourists go out for their second game drive of the day. Or, when the conservation team works in the field the whole day, The Park can still be a “tourist experience” from 06:00 till 10:00 in the morning, but not on the northeastern plains where the work takes place. In that location, The Park as an “ecosystem to be conserved” takes precedence. Similarly 200 meters up the road, there too, a parked machine marks The Park as an “ecosystem to be conserved.” In this way, conservation and tourism (re)shape each other through their partnership: their mutual dependency leads them to co-adapt.

Thus, in practice, neither version of The Park takes absolute precedence over the other. What we see instead is that both exclude each other at certain times in certain spaces. As Mol (2002) has described for different versions of a disease in the hospital, here the different versions of The Park are distributed and this prevents them from clashing. This is not a top-down zoning scheme or something that can be written up in a contract. Instead, distribution is something that needs to take place in practice on the ground. This means that an interference that may lead to a clash can be successfully avoided only through the collective actions of the conservation team, lodge managers, and guides. And the machines can be added to this too. This is because if the machine is small enough, it can be parked behind bushes and out of sight of tourists, and tourism can take place uninterrupted, whereas if the machine is too big—as seen in Figure 1—there is no way around it other than guides avoiding the location on their game drives. Machine operators are tasked with trying to park the machines as well as possible (meaning out of sight without destroying the surrounding vegetation and soil), and judging whether they are sufficiently well hidden. We find that this seemingly ordinary work is what decides whether tourism “wins” or “loses” locally.

Wildlife Population Management: On Compromise

Another instance of the conservation and tourism versions of The Park being coordinated is in the issue of wildlife population management. We start this inquiry considering one particular morning of fieldwork when the first author joined the conservation team’s environmental monitor and its junior manager to perform a vegetation condition assessment. From his field notes:

Five transects, that’s how many we are going to do today. Each sixty meters long, with one sample each meter. Three hundred samples. It’s going to be a long day. But luckily the work goes fast. It helps that there are only a few grass species in our transects, so we can identify them easily. But I am of no use for that. My task is just to note down for each sample what names of the species they identify and the height that they measure. For the latter they use a simple but effective instrument. It consists of a ruler held vertically that has a disc on it that can be dropped down on the ground. Zero centimeter is what it reads when the soil is bare. A little more if it has grass growth. I note a lot of zeroes.

The first author came along for only a few transects, since many more still had to be done. However, it was clear that in these sections, there was very little grass and many patches of soil were bare. We were told this was due to overgrazing by the many grazers in The Park. As we read in *Veld Management*, overgrazing causes bush encroachment because the grazers prefer palatable grasses over bush encroachers, so the grazers “weaken [grasses] to the benefit of encroaching species” (Van Oudtshoorn 2015, 82). This is a common problem in fenced areas such as The Park, where animals cannot disperse freely and population dynamics are affected. Fences thus introduce a perceived need for wildlife population management.

The assessment of vegetation condition joined by the first author that particular morning plays an important role in wildlife population management. The assessment measures how much grass there is and uses this in a model to determine how many grazers the ecosystem can support. This number of animals—the “carrying capacity” of The Park—is calculated and set once every year. Various carrying capacity models are used in South Africa based on the environment and management regime, but in its most basic form, it includes an index for the vegetation condition and a rainfall factor.¹²

Together with the results of a game count to see how many animals there are, the carrying capacity is the basis for determining how many animals need to be removed from The Park every year. One way of removing the animals is culling them. This option is preferred by the conservation team because it is more cost-effective than the alternative of translocation, which requires hiring an expensive game capture company. However, culling also interferes with tourism’s version of The Park. This was brought up by one of the conservation managers as we discussed the impacts of COVID-19 emptying The Park of tourists:

It is both a threat and an opportunity, you know. Impalas are difficult to sell, or at least the price is very low. So, economically, it actually makes more sense to shoot them and reduce the costs of translocation. But with guests at the lodge, this is not possible; they shouldn’t hear shots fired. In that sense, the situation [where tourists are absent] also brings an opportunity.

For the conservation team, it is best to remove the impalas as cheaply as possible because it leaves more money for the required conservation operations. However, when tourists are in The Park, culling would interfere with tourism’s version of The Park, which prefers the sounds of non-human animals over gunshots. While sometimes conservation and tourism align, here they point in opposite directions.

This is also the case when we shift focus from the *way* in which animals are removed to the issue of *how many* of them are removed. For tourists, a “good” number of animals looks very different than that for conservationists. Seeing abundant wildlife is crucial to enact The Park as a tourist experience. Therefore, as the general manager of the conservation team explains, the conservation team is limited in how many animals it can remove from The Park:

If we were able to make those decisions ourselves, and we didn’t have pressure to be viewing animals every day, we could take a much more aggressive approach toward wildlife removals. Take off massive numbers quickly, and then allow the property to recover. So, tourism definitely plays a role in not achieving some of the biological diversity objectives, because you can’t take away the core of your tourist attraction.

To conserve The Park, an aggressive approach is needed, where many animals are removed to avoid overgrazing, whereas if The Park is to attract tourists, a more hands-off approach is more fitting, where few animals are removed. As with culling and translocation, here conservation and tourism point in opposite directions. Unlike the machine parking issue, in this case, it is not possible to avoid clashes by distributing and separating out conservation and tourism versions of The Park; there cannot be an abundant wildlife population in one place, and a sustainable wildlife population in another. A single intervention is to interfere in both versions of The Park. Is this a case where tourism trumps nature? West and Carrier (2004) have described how nature parks, in an effort to attract tourists and their money, make nature conform to tourist preferences and imaginaries—with often adverse social and/or environmental impacts.¹³ Is this also the case in The Park? May conservation’s concern for overgrazing be similarly subordinated to ensuring good wildlife visibility for the tourists?

Our analysis suggests that this is not a matter of straightforward dominance, but one of compromise (see also Heuts and Mol 2013). The conservation team takes neither the aggressive approach that they think would be best for nature, nor the hands-off approach that tourism prefers, but instead opts for an approach that keeps the wildlife populations just below the carrying capacity of The Park. The resulting number of animals is justifiable from a conservation perspective since it prevents irreversible degradation, while maintaining enough opportunities for wildlife viewing. Thus, rather than win–lose outcome, here the two split the difference. Since conservation depends on tourism to fund its activities, it has to adapt, but that does not mean that it suffers a total loss.

Bush Clearing: On Excess

Wildlife management is one way to address the issue of bush encroachment, but it is constrained by tourist preferences. Consequently, the number of animals remains too high to allow for the plains' full recovery, and too many bushes remain. Extra effort is therefore needed, and this comes in the form of bush clearing. Bush clearing is a three-step process performed by the conservation team. In the first year, encroaching bushes are mechanically cleared with a mulcher (a machine that functions as a sort of shredder). The year after, regrowth of the bushes is countered by manually applying herbicide. For this second step, a team of over ten people works full days throughout the summer season. The team works with a big septic tank filled with the herbicide, brought into the field on a trailer hooked to the back of a tractor. From there, the team members fill up their smaller tanks, which they carry on their backs and which are connected to a spraying device that can be manually operated. To keep track of where the team has already sprayed, a blue colorant is added to the herbicide which does not really come off, leaving the dead bushes to stand out (see Figure 2). While this may just be a practicality in the herbicide application, it is an issue when tourists see it. The tourist guides say it does not look "natural;" it ruins the wilderness experience they seek to provide tourists. So, for the third and final steps of bush clearing, the conservation team mechanically clears the (now dead and blue) bushes once more, whereby the aesthetic of the plains is restored.

In this third step, it is clear that the conservation team is trying to annul the interference and prevent a clash with tourism's version of The Park. In a more careful analysis of the situation, however, we find that this effort is not limited to only the third step of the bush clearing process, but applies to the operation from start to finish. This clash would not result from tourists seeing blue bushes, but rather from seeing bushes and bushes only (regardless of color). Indeed, as mentioned, for tourists, these bushes obstruct spotting and viewing the wildlife they want to see. Although for the plains' conservation, the bushes are not the immediate concern (more on this below), the inaction this suggests becomes an issue for tourism, and thus clearing them serves to enact The Park as a tourist experience.

To clarify, we consider bush encroachment as being enacted in two different ways. First, there is bush encroachment as a long *process* which not only involves plants, but also soils and grazers. Second, we may see bush encroachment as a *state* of the plains with too many bushes and too little grass (regardless of what caused the process of encroachment).¹⁴ It is the



Figure 2. In a national park in South Africa, herbicide is sprayed on bushes that encroach on the grassland. The colorant in the herbicide makes the application visible on the bushes' thorns (and in this case also on the termite mound). This visibility helps to keep track of the spraying but makes the park look unnatural to tourists who visit the park for wildlife viewing. Photo taken by the first author, 2020.

latter version that is addressed and enacted through bush clearing. It results in a temporary situation in which good wildlife sightings are possible for tourists, but it does not actually stop bush encroachment continuing. As one of the conservation team's managers tells us, only its symptoms are addressed while the process remains in place. As we have shown in the previous section, conservation's version of bush encroachment is enacted in—and must be addressed through—wildlife management.

Against this background, we posit that bush clearing addresses bush encroachment as a threat only to The Park as a tourist experience, and not as an ecosystem to be conserved. And thus, it is tourism's version of The Park that comes to matter more than conservation's version. The fact that it is the conservation team that performs the bush clearing should not mislead us—when the team performs bush clearing, it is a tourism support crew that incurs serious costs in performing this operation (a whole summer of work by a team of more than ten people, plus many liters of herbicide and diesel).¹⁵ As such, conservation is subsumed under tourism.

Yet, conservation is not fully subsumed under tourism to the extent that The Park is singularly a tourist experience. Through bush clearing, tourism's version of The Park comes to matter, but *not only* (De la Cadena 2018). Here is where money comes in. Bush clearing is done with the expectation that more tourists will come, resulting in more money paid through concession fees to the conservation team, allowing them to fund their operations. In the years preceding the fieldwork for this article, growing budgets had enabled the conservation team to appoint two new managers, and to perform new operations that it had previously been unable to do.¹⁶ This anticipation of increased income for conservation is what led the conservation manager to justify the practice of bush clearing. The ecosystem to be conserved thus becomes part of what bush clearing enacts. Through this arrangement, bush clearing exceeds the enactment of tourism's version of The Park; not all differences are erased. In the practice of bush clearing, conservation comes to matter too. The single practice of bush clearing enacts two versions of the Park; one in the form of cleared, open plains for tourists to enjoy, the other in the form of (anticipated) money to be spent on conservation operations. Both come to matter, but both come to lose something too. This is because while there may be a "net profit," the herbicides and burned fuel persist in the soil and in the air. By refusing to pass over these losses in our analysis (but not ignoring the gains either), we can recognize how this situation presents both a subsumption *and* simultaneously exceeds the subsumption. This analysis holds true for all the impacts that are condoned in The Park because of conservation and tourism's mutual dependencies.

Toward Response-Able Tourism

As we have shown, there are many possibilities for enacting and coordinating The Park in different ways. These possibilities are found in diverse practices ranging from parking machines out of sight to removing animals from the site. However, there are limits to what is possible as the capacity of dealing with interferences, or the openness toward different versions of The Park, is restricted for both conservation and tourism practitioners. Yet, in The Park, openness is especially restricted on the tourism side as tourists are actively shielded from experiencing the multiple practices that make up The Park and the partnership. They are kept largely unaware of, and therefore unable to respond to, the many interventions that shape The Park in ways that benefit them at the expense of others. To maintain the positive image associated with ecotourism, these

interventions and the ways they interfere with conservation are hidden from tourists' view.

In this section of our article, we ask what would happen if we burst the eco-tourism bubble? (Carrier and Macleod 2005; Meletis and Campbell 2007). What if we move from responsible tourism, where tourism adheres to norms of good practice, to "response-able" (Haraway 2012; Barad 2007; Meesters, Pauwelussen and Turnhout 2024) tourism, where actors create a shared space to confront and experience the tensions between tourism and conservation? Can this form of tourism transform conservation–tourism partnerships? Could we have tourists "stay with the trouble" (Haraway 2016) and tend to the losses in coordination as alternative entangled states of conservation and tourism are foreclosed? What if tourists become response-able and accountable actors in the ontological politics of The Park?

Us writing about conservation and tourism practices in the pages of this journal, as Law and Mol (2008) suggest, may reveal the contingency of these practices, but is unlikely to make a significant change given the active effort to suppress awareness of this contingency. To raise more awareness, we need interventions at the very site of tourism encounters. Perhaps this is wishful thinking, but based on our ethnography, we believe that there are promising possibilities. For example, tourist guides, when they accidentally run into a machine on game drives, are often able to tell the tourists why the machine is standing there, without necessarily making tourists feel bad about themselves, or without ruining their experience. They are performing what one of our research interlocutors called "narrative control:" assisting tourists in their interpretation of a potentially disturbing situation. While interpretation is commonly used as a management tool to inform, educate, and instill pre-given norms (Mearns and Botha 2018), we argue that narrative control can be used to evoke responses in moments of encounter. In other words, we suggest that narrative control offers a tinkering approach to storytelling; the careful articulation of interconnectedness through attentiveness and learned skills, similar to the lively ethnographic storytelling given by Van Dooren and Rose (2016). Through narrative control, guides can foreground the entangled concerns of conservation and tourism, and play a role in tending to the losses. To what extent these losses can be made visible cannot be established upfront or detailed in a code of conduct. The guides must act on a case-by-case basis, assessing the situation and reading tourists' responses.

Recognition of this skill and including it in tourist guide training may help the profession and the industry to move forward, toward a more response-able tourism. We can see elements of such response-able tourism already emerging

in forms of “voluntourism” that are based on active participation and contribution (Meletis and Campbell 2007). With that, what tourism has to offer changes from merely a pleasant tourist experience, to a potentially more enriching one, in which tourists not only experience wildlife, but also the tensions between tourism and conservation—and in which they can engage with and respond to these tensions. This may have important consequences beyond conservation and tourism, as we suggest below.

Conclusion

While existing approaches to conservation–tourism partnerships have characterized them as win–win or win–lose situations, we have followed the call by Ren (2021, 138) to move beyond “binary accounts of hope and despair, celebration, and condemnation, not seeing tourism as a silver bullet, nor as inherently ‘bad.’” Our account presented conservation–tourism partnerships as constituted by practices that result in complex and messy orderings, where tourism’s relation to conservation is neither entirely positive nor simply detrimental. We have shown that conservation and tourism versions of The Park sometimes overlap or align, but often they do not, and hence they do not in all cases come to matter equally or fully. In one instance, it may become primarily an *eco-system to be conserved*, and in another instance, the *tourist experience* may come to matter more.

While our analysis critiques a win–win rhetoric of conservation–tourism partnerships, it also scrutinizes the rhetoric of win–lose outcomes based on fixed power relations. What we have observed is not the common domination of tourism over conservation versions of The Park, as some critical analyses have suggested (West and Carrier 2004; Duffy 2015; Fletcher and Neves 2012). Instead, conservation and tourism come to matter *there and there* (in different spaces), *then and then* (in different times); both come to matter in a version that is *in between*; or one of them comes to matter, but *not only*. As we have shown, distributions, compromises, and excesses occur in the coordination of the two versions. These complex and messy dynamics defy a singular or totalized understanding of who (or what) wins and losses, and how. Different versions may be excluded, subordinated, or subsumed, and these coordinations can result in losses even if—as we have shown in our analysis—they are negotiated and therefore not total.

In this account, the mattering of versions takes place through relations of interference and coordination between multiple enactments. This analytical

approach has enabled us to not only map multiplicity and identify alignments and frictions, but also to show in more detail the dynamics involved in what Duffy and Moore (2010) call a “hybridization” of forces. Specifically, we have shown that when conservation and tourism meet, there is a variety of possibilities for how their relation may be shaped, with better or worse outcomes for either. Coordination draws attention to this range of possibilities and the mechanisms that lie behind realizing them. Drawing on De la Cadena (2018), Heuts and Mol (2013), and Mol (2002), we have identified three such mechanisms at play in the conservation–tourism partnership in The Park: distribution, compromise, and excess. Together, they illustrate the diversity of power relations that can emerge in coordination practices.

By showing this multiplicity, our analysis shifts the scholarly and societal debate from the question of “what is true nature?” to the question of “what is good nature?” (Daniels and Mather 2017). As we suggested, response-able tourism would allow tourists to question whether The Park should be the wilderness they imagined it to be, which could lead to greater openness toward conservation ways of enacting and valuing nature. If tourists are no longer guided away from the visible signs of conservation management, it may weaken the tourist imaginary of wilderness, and its power to shape nature parks. This is important because it may bring a change in tourism practices with rippling effects that extend beyond tourism and conservation, and open up The Park to other enactments of nature.

The question is whether this is enough. Our analysis of ontological politics has considered ontologies as “practical achievements” (Bonelli 2015) and this focuses the attention on ontologies that are enacted, and the power relations that emerge between them. Consequently, a blind spot of this approach is that it is less able to shed light on that which is not coordinated.¹⁷ While our ontological politics approach has enabled us to analyze coordination practices between multiple ontologies, we have been less attentive to the fact that conservation and tourism are both grounded in a modernist ontology that is based on the idea of wilderness and the separation of humans and nature, and the suppression of alternatives to that. We suggest that our ontological politics approach may be productively complemented by a political ontology approach, which is more attentive to “radical difference” (Bonelli 2015), usually between Western, science-based, and modernist ontologies on the one hand, and Indigenous ontologies on the other (Kohn 2015). As such, a political ontology approach can highlight the ontologies that are suppressed by dominant scientific, modernist, or

Western ontologies, to the extent that they are not even coordinated (Blaser 2009; Gelves-Gomez, Davison and Cooke 2024; Pauwelussen and Verschoor 2017).

Employing a political ontology approach would have directed our attention to alternative ontologies of nature—including those of local and Indigenous peoples—that are not coordinated in The Park but may exist in the margins (Moyo 2023; Thondhlana and Cundill 2017). Combining an ontological politics and a political ontology approach could accomplish a twofold weakening of the monopoly of modernism on nature and nature parks (Law 2015; Pauwelussen 2017, 24-25, 154-155): first, by using an ontological politics approach to show the multiplicity within modernism, which is generally assumed to be homogenous in political ontology analyses (Borpoudakis 2019; Bertoni 2012; Yates-Doerr and Mol 2012), and second, by employing a political ontology approach to show alternatives to modernism, which are often excluded from ontological politics analyses. This combined approach could create a space for more radical forms of politics and multiplicity that would enable suppressed ontologies to reshape nature parks in multiple ways.

Acknowledgments

We are grateful to the conservation managers, tourism operators, and tourist guides of The Park for sharing their insights and giving their time. We also want to thank the anonymous reviewers and the editors for their constructive feedback and help in substantially improving this article.


Declaration of Conflicting Interests


The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.


Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs

Wisse Van Engelen  <https://orcid.org/0000-0002-2426-5180>

Annet Pauwelussen  <https://orcid.org/0000-0002-1349-9539>

Esther Turnhout  <https://orcid.org/0000-0002-2190-2076>

Notes

1. These quotes are taken from the concession agreement between The Park's conservation team and tourism operator.
2. Fletcher and Neves (2012) point out that not in all cases tourism produces negative results for conservation even if their theoretical analysis speaks differently.
3. Such "actually existing" neoliberal natures are analyzed in other environmental governance fields such as fisheries (Mansfield 2004) or forestry (McCarthy 2005).
4. We use the term intra-action instead of interaction to signal the primacy of relations rather than pre-existing relata (Barad 2007).
5. Grazers are animals that feed almost exclusively on grasses. Species considered grazers include the plains zebra, blue wildebeest, and white rhino, among others. While grasses also grow in other parts of The Park, the grasses on the plains are especially important because they are considered "sweetveld" grasses that are highly palatable and nutritious, and therefore support a large population of grazers.
6. This preoccupation with productive power in actor-network theory has been noted by Law and Singleton (2013).
7. For an alternative approach which aims to draw attention to repressive power in actor-network theory, see Galis and Lee (2014).
8. Pseudonymization of The Park was a condition agreed upon with research interlocutors prior to the research.
9. In contrast to a matter of fact, which is a registering of only a single version, and therefore remains closed to contestation, a matter of concern is a gathering of multiple versions and therefore a site of contestation. See Latour (2004).
10. For interference, see Mol (1999) and Moser (2006, 2008).
11. This quote is taken from the concession agreement between The Park's conservation team and tourism operator.
12. For a genealogy of the concept of carrying capacity and its various uses, see Sayre (2008).
13. In a later publication, West and Carrier recognize explicitly that discrepancies between imaginaries and practice are actually commonplace, thus problematizing their earlier model (Carrier and West 2009).
14. This distinction is inspired by the analysis by Mol (2002) on the ways in which two disease treatments differ.
15. In light of this, when tourists encounter a parked machine that is used for bush clearing, it does not constitute a clash between conservation and tourism, but rather between the front- and backstage of tourism.

16. This situation changed after the onset of the COVID-19 pandemic, which coincided with the time of fieldwork for this study and affected international tourism around the world, leaving many parks without adequate funding for conservation (Hockings et al. 2020).
17. For a similar critique of relational approaches in general, see Giraud (2019).

References

- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Bertoni, Filippo. 2012. "Charming Worms: Crawling Between Natures." *The Cambridge Journal of Anthropology* 30 (2): 65-81. <https://doi.org/10.3167/ca.2012.300205>.
- Blaser, Mario. 2009. "The Threat of the Yrmo: The Political Ontology of a Sustainable Hunting Program." *American Anthropologist* 111 (1): 10-20. <https://doi.org/10.1111/j.1548-1433.2009.01073.x>.
- Bonelli, Cristóbal. 2015. "To See That Which Cannot Be Seen: Ontological Differences and Public Health Policies in Southern Chile." *Journal of the Royal Anthropological Institute* 21 (4): 872-91. <https://doi.org/10.1111/1467-9655.12292>.
- Borpoudakis, Dimitrios. 2019. "Three Implications of Political Ontology for the Political Ecology of Conservation." *Journal of Political Ecology* 26 (1): 545-66. <https://doi.org/10.2458/v26i1.22014>.
- Buckley, Ralf. 2004. *Environmental Impacts of Ecotourism*. Cambridge, MA: CABI.
- Bueger, Christian. 2014. "Pathways to Practice: Praxiography and International Politics." *European Political Science Review* 6 (3): 383-406. <https://doi.org/10.1017/S1755773913000167>.
- Buijs, Arjen, Birgit Elands, and Ramona van Marwijk. 2012. "Where Management Practices and Experiential Practices Meet: Public Support and Conflict in Ecosystem Management." In *Forest and Nature Governance: A Practice Based Approach*, edited by Bas Arts, Jelle Behagel, Séverine van Bommel, Jessica De Koning, and Esther Turnhout, 193-216. Dordrecht: Springer.
- Büscher, Bram, Sian Sullivan, Katja Neves, Jim Igoe, and Dan Brockington. 2012. "Towards a Synthesized Critique of Neoliberal Biodiversity Conservation." *Capitalism Nature Socialism* 23 (2): 4-30. <https://doi.org/10.1080/10455752.2012.674149>.
- Callon, Michel. 1984. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." *The Sociological Review* 32 (Suppl 1): 196-233. <https://doi.org/10.1111/j.1467-954X.1984.tb00113.x>.
- Carpenter, Carol. 2020. *Power in Conservation: Environmental Anthropology Beyond Political Ecology*. New York, NY: Routledge.

- Carrier, James G. and Donald V.L. Macleod. 2005. "Bursting the Bubble: The Socio-Cultural Context of Ecotourism." *Journal of Royal Anthropological Institute* 11 (2): 315-34. <https://doi.org/10.1111/j.1467-9655.2005.00238.x>.
- Carrier, James G. and Paige West. 2009. *Virtualism, Governance and Practice: Vision and Execution in Environmental Conservation*. New York, NY: Berghahn Books.
- Carruthers, Jane. 2009. "National Parks in South Africa." In *Evolution and Innovation in Wildlife Conservation*, edited by Helen Suich, Brian Child, and Anna Spenceley, 35-49. New York, NY: Earthscan.
- Convention on Biological Diversity (CBD). 2014. "Agenda Item 29: Biodiversity and Tourism Development." Accessed April 9, 2020. <https://www.cbd.int/meetings/COP-12>.
- Daniels, Jennifer and Charles Mather. 2017. "Conserving Atlantic Salmon 'After Nature' on Newfoundland's Gander River." *BJHS Themes* 2: 191-213. <https://doi.org/10.1017/bjt.2016.15>.
- De la Cadena, Marisol. 2018. "Earth-Beings: Andean Indigenous Religion, But Not Only." In *The World Multiple: The Quotidian Politics of Knowing and Generating Entangled Worlds*, edited by Keiichi Omura, Grant Jun Otsuki, Shihō Satsuka, and Atsuro Morita, 20-36. New York, NY: Routledge.
- Duffy, Rosaleen. 2015. "Nature-based Tourism and Neoliberalism: Concealing Contradictions." *Tourism Geographies* 17 (4): 529-43. <https://doi.org/10.1080/14616688.2015.1053972>.
- Duffy, Rosaleen and Lorraine Moore. 2010. "Neoliberalising Nature? Elephant-Back Tourism in Thailand and Botswana." *Antipode* 42 (3): 742-66. <https://doi.org/10.1111/j.1467-8330.2010.00771.x>.
- Elands, Birgit and Ramona van Marwijk. 2008. "Keep An Eye on Nature Experiences: Implications for Management and Simulation." In *Monitoring, Simulation, and Management of Visitor Landscapes*, edited by Randy Gimblett and Hans Skov-Petersen, 59-83. Tucson, AZ: The University of Arizona Press.
- Fletcher, Robert and Katja Neves. 2012. "Contradictions in Tourism: The Promise and Pitfalls of Ecotourism as a Manifold Capitalist fix." *Environment and Society* 3 (1): 60-77. <https://doi.org/10.3167/ares.2012.030105>.
- Friese, Carrie. 2015. "Genetic Value: The Moral Economies of Cloning in The Zoo." In *Value Practices in the Life Sciences and Medicine*, edited by Isabelle Dussauge, Claes-Fredrik Helgesson, and Francis Lee, 153-67. Oxford: Oxford University Press.
- Galis, Vasilis and Francis Lee. 2014. "A Sociology of Treason: The Construction of Weakness." *Science, Technology, & Human Values* 39 (1): 154-79. <https://doi.org/10.1177/0162243913512681>.

- Gelves-Gomez, Francisco, Aidan Davison, and Benjamin Cooke. 2024. "Relations of Divergence and Convergence. Political Ontology at the Intersection of Protected Areas and Neoliberal Conservation." *Ecosystems and People* 20 (1): 2390472. <https://doi.org/10.1080/26395916.2024.2390472>.
- Giraud, Eva Haifa. 2019. *What comes After Entanglement?: Activism, Anthropocentrism, and an Ethics of Exclusion*. Durham, NC: Duke University Press.
- Grossman, David and Phillipa Holden. 2009. "Towards Transformation: Contractual National Parks in South Africa." In *Evolution and Innovation in Wildlife Conservation*, edited by Helen Suich, Brian Child, and Anna Spenceley, 357-72. New York, NY: Earthscan.
- Haraway, Donna. 2012. "Awash in Urine: DES and Premarin® in Multispecies Response-Ability." *Women's Studies Quarterly* 40 (1/2): 301-16. <https://doi.org/10.1353/wsq.2012.0005>.
- Haraway, Donna. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.
- Helford, Reid M. 1999. "Rediscovering the Presettlement Landscape: Making the Oak Savanna Ecosystem 'Real'." *Science, Technology, & Human Values* 24 (1): 55-79. <https://doi.org/10.1177/016224399902400104>.
- Heuts, Frank and Annemarie Mol. 2013. "What Is a Good Tomato? A Case of Valuing in Practice." *Valuation Studies* 1 (2). <https://doi.org/10.3384/vs.2001-5992.1312125>.
- Hinchliffe, Steve and Nick Bingham. 2008. "Securing Life: The Emerging Practices of Biosecurity." *Environment and Planning A: Economy and Space* 40 (7): 1534-51. <https://doi.org/10.1068/a4054>.
- Hockings, Marc, Nigel Dudley, Wendy Elliott, Madhu Rao, Kent Redford, and John Robinson. 2020. "COVID-19 and Protected and Conserved Areas." *Parks* 26 (1): 7-24. <https://doi.org/10.2305/IUCN.CH.2020.PARKS-26-1MH.en>.
- KC, Birendra. 2021. "Complexity in Balancing Conservation and Tourism in Protected Areas: Contemporary Issues and Beyond." *Tourism and Hospitality Research* 22 (2): 241-6. <https://doi.org/10.1177/14673584211015807>.
- Kohn, Eduardo. 2015. "Anthropology of Ontologies." *Annual Review of Anthropology* 44: 311-27. <https://doi.org/10.1146/annurev-anthro-102214-014127>.
- Latour, Bruno. 1984. "The Powers of Association." *The Sociological Review* 32 (Suppl 1): 264-80. <https://doi.org/10.1111/j.1467-954X.1984.tb00115.x>.
- Latour, Bruno. 2004. "Why has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30 (2): 225-48. <https://doi.org/10.1086/421123>.
- Law, John. 1993. *Organising Modernity: Social Ordering and Social Theory*. Oxford: Wiley-Blackwell.

- Law, John. 2004. *After Method: Mess in Social Science Research*. London: Routledge.
- Law, John. 2015. "What's Wrong with a one-World World?" *Distinktion: Scandinavian Journal of Social Theory* 16 (1): 126-39. <https://doi.org/10.1080/1600910X.2015.1020066>.
- Law, John and Annemarie Mol. 2008. "Globalisation in Practice: On the Politics of Boiling Pigswill." *Geoforum* 39 (1): 133-43. <https://doi.org/10.1016/j.geoforum.2006.08.010>.
- Law, John and Vicky Singleton. 2013. "ANT and Politics: Working in and on the World." *Qualitative Sociology* 36 (4): 485-502. <https://doi.org/10.1007/s11133-013-9263-7>.
- Leung, Yu-Fai, Anna Spenceley, Glen Hvenegaard, and Ralf Buckley. 2018. *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability*. Gland: IUCN.
- Lippert, Ingmar, Franz Krause, and Niklas Klaus Hartmann. 2015. "Environmental Management as Situated Practice." *Geoforum* 66: 107-14. <https://doi.org/10.1016/j.geoforum.2015.09.006>.
- Lorimer, Jamie and Clemens Driessen. 2013. "Bovine Biopolitics and the Promise of Monsters in the Rewilding of Heck Cattle." *Geoforum* 48: 249-59. <https://doi.org/10.1016/j.geoforum.2011.09.002>.
- Mansfield, Becky. 2004. "Rules of Privatization: Contradictions in Neoliberal Regulation of North Pacific Fisheries." *Annals of the Association of American Geographers* 94 (3): 565-84. <https://doi.org/10.1111/j.1467-8306.2004.00414.x>.
- Mansfield, Becky, Christine Biermann, Kendra McSweeney, Justine Law, Caleb Gallemore, Leslie Horner, and Darla K. Munroe. 2015. "Environmental Politics After Nature: Conflicting Socioecological Futures." *Annals of the Association of American Geographers* 105 (2): 284-93. <https://doi.org/10.1080/00045608.2014.973802>.
- McCarthy, James. 2005. "Devolution in the Woods: Community Forestry as Hybrid Neoliberalism." *Environment and Planning A: Economy and Space* 37 (6): 995-1014. <https://doi.org/10.1068/a36266>.
- Mearns, Kevin and Elicke Botha. 2018. "The Roles of Interpretation in the Management of National Parks in South Africa." In *National Parks—Management and Conservation*, edited by Mohd Nazip Suratman, 143-56. London: IntechOpen.
- Meesters, Marieke, Annet Pauwelussen, and Esther Turnhout. 2024. "The Politics of Amphibiousness: Shifting Coastal Management in the Netherlands. Science, Technology." *Human Values*: 1-27. <https://doi.org/10.1177/01622439241239768>.
- Meletis, Zoë A and Lisa M. Campbell. 2007. "Call it Consumption! Re-Conceptualizing Ecotourism as Consumption and Consumptive." *Geography Compass* 1 (4): 850-70. <https://doi.org/10.1111/j.1749-8198.2007.00048.x>.

- Middelveld, Senna, René van der Duim, and Rico Lie. 2015. "Reef Controversies: The Case of Wakatobi National Park, Indonesia." In *Tourism Encounters and Controversies: Ontological Politics of Tourism Development*, edited by Gunnar Thór Jóhannesson, Carina Ren, and René van der Duim, 51-64. London: Routledge.
- Mol, Annemarie. 1999. "Ontological Politics. A Word and Some Questions." *The Sociological Review* 47 (Suppl 1): 74-89. <https://doi.org/10.1111/j.1467-954X.1999.tb03483.x>.
- Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Durham, NC: Duke University Press.
- Mol, Annemarie. 2012. "Mind Your Plate! The Ontonorms of Dutch Dieting." *Social Studies of Science* 43 (3): 379-96. <https://doi.org/10.1177/0306312712456948>.
- Mol, Annemarie and John Law. 2002. "Complexities: An introduction." In *Complexities: Social Studies of Knowledge Practices*, edited by John Law and Annemarie Mol, 1-22. Durham, NC: Duke University Press.
- Moore, Amelia. 2020. "Selling Anthropocene Space: Situated Adventures in Sustainable Tourism." In *Anthropocene Ecologies*, edited by Mary Mostafanezhad and Roger Norum, 15-30. New York, NY: Routledge.
- Moser, Ingunn. 2006. "Sociotechnical Practices and Difference: On the Interferences Between Disability, Gender, and Class." *Science, Technology, & Human Values* 31 (5): 537-64. <https://doi.org/10.1177/0162243906289611>.
- Moser, Ingunn. 2008. "Making Alzheimer's Disease Matter. Enacting, Interfering and Doing Politics of Nature." *Geoforum* 39 (1): 98-110. <https://doi.org/10.1016/j.geoforum.2006.12.007>.
- Moyo, Inocent. 2023. "Beyond a Tokenistic Inclusion of Indigenous Knowledge Systems in Protected Area Governance and Management in Okhahlamba-Drakensberg." *African Geographical Review* 42 (2): 141-56. <https://doi.org/10.1080/19376812.2021.1997613>.
- Musavengane, Regis and Llewellyn Leonard. 2019. "When Race and Social Equity Matters in Nature Conservation in Post-Apartheid South Africa." *Conservation and Society* 17 (2): 135-46. https://doi.org/10.4103/cs.cs.18_23.
- Nustad, Knut G. 2011. "Performing Natures and Land in the iSimangaliso Wetland Park, South Africa." *Ethnos* 76 (1): 88-108. <https://doi.org/10.1080/00141844.2010.546866>.
- Pauwelussen, Annet P. 2017. *"Amphibious Anthropology: Engaging with Maritime Worlds in Indonesia."* PhD Thesis, Wageningen University.
- Pauwelussen, Annet P. and Gerard Verschoor. 2017. "Amphibious Encounters: Coral and People in Conservation Outreach in Indonesia." *Engaging Science, Technology, and Society* 3: 292-314. <https://doi.org/10.17351/ests2017.59>.
- Puig de la Bellacasa, María. 2011. "Matters of Care in Technoscience: Assembling Neglected Things." *Social Studies of Science* 41 (1): 85-106. <https://doi.org/10.1177/0306312710380301>.

- Ren, Carina. 2021. "(Staying with) the Trouble with Tourism and Travel Theory?" *Tourist Studies* 21 (1): 133-40. <https://doi.org/10.1177/1468797621989216>.
- Sayre, Nathan F. 2008. "The Genesis, History, and Limits of Carrying Capacity." *Annals of the Association of American Geographers* 98 (1): 120-34. <https://doi.org/10.1080/00045600701734356>.
- Spenceley, Anna, Jon Kohl, Simon McArthur, Peter Myles, Marcello Notarianni, Dan Paleczny, Catherine Pickering, and Graeme L Worboys. 2015. "Visitor Management." In *Protected Area Governance and Management*, edited by Graeme L Worboys, Michael Lockwood, Ashish Kothari, Sue Feary, and Ian Pulsford, 715-50. Canberra: ANU Press.
- Spenceley, Anna, Susan Snyman, and Paul F. J Eagles. 2017. "Guidelines for tourism partnerships and concessions for protected areas: Generating sustainable revenues for conservation and development." *Report to the Secretariat of the Convention on Biological Diversity and IUCN*.
- Strathern, Marilyn. 1991. *Partial Connections*. Savage, MD: Rowman and Littlefield.
- Sumanapala, Daminda and Isabelle D Wolf. 2019. "Recreational Ecology: A Review of Research and gap Analysis." *Environments* 6 (7): 81. <https://doi.org/10.3390/environments6070081>.
- Thondhlana, Gladman and Georgina Cundill. 2017. "Local People and Conservation Officials' Perceptions on Relationships and Conflicts in South African Protected Areas." *International Journal of Biodiversity Science, Ecosystem Services & Management* 13 (1): 204-15. <https://doi.org/10.1080/21513732.2017.1315742>.
- Van Dam, Arvid, Wisse van Engelen, Detlef Müller-Mahn, Sheila Agha, Sandra Junglen, Christian Borgemeister, and Michael Bollig. 2024. "Complexities of Multispecies Coexistence: Animal Diseases and Diverging Modes of Ordering at the Wildlife–Livestock Interface in Southern Africa." *Environment and Planning E: Nature and Space* 7 (1): 353-74. <https://doi.org/10.1177/25148486231160637>.
- Van der Duim, René, Christine Ampumuza, and Wilber Manyisa Ahebwa. 2014. "Gorilla Tourism in Bwindi Impenetrable National Park, Uganda: An Actor-Network Perspective." *Society & Natural Resources* 27 (6): 588-601. <https://doi.org/10.1080/08941920.2014.901459>.
- Van Dooren, Thom and Deborah Bird Rose. 2016. "Lively Ethography: Storying Animist Worlds." *Environmental Humanities* 8 (1): 77-94. <https://doi.org/10.1215/22011919-3527731>.
- Van Oudtshoorn, Frits. 2015. *Veld Management: Principles and Practices*. Pretoria: Briza Publications.
- Verzijl, Andres and Carolina Dominguez. 2015. "The Powers of Water-User Associations: On Multiplicity, Fluidity, and Durability in the Peruvian Andes."

- International Journal of the Commons* 9 (1): 107-28. <https://doi.org/10.18352/ijc.537>.
- Watson, Matthew. 2003. "Performing Place in Nature Reserves." *The Sociological Review* 51 (Suppl 2): 145-60. <https://doi.org/10.1111/j.1467-954X.2004.00456.x>.
- West, Paige and James G. Carrier. 2004. "Ecotourism and Authenticity: Getting Away from it all?" *Current Anthropology* 45 (4): 483-98. <https://doi.org/10.1086/422082>.
- Worboys, Graeme, Michael Lockwood, and Terry De Lacy. 2005. *Protected Area Management: Principles and Practice*. 2nd ed. Melbourne: Oxford University Press.
- Yates-Doerr, Emily and Annemarie Mol. 2012. "Cuts of Meat: Disentangling Western Natures-Cultures." *The Cambridge Journal of Anthropology* 30 (2): 48-64. <https://doi.org/10.3167/ca.2012.300204>.

Authors Biographies

Wisse Van Engelen is an STS PhD researcher at the University of Twente and works as a scientific employee at the Social and Cultural Anthropology Department at the University of Cologne. His research focuses on wildlife conservation and its intersections with other sectors such as tourism and animal disease control, through the lens of STS, political ecology, multispecies relations, and history.

Annet Pauwelussen works as an assistant professor at the Environmental Policy Group at Wageningen University. Her work focuses on environmental justice and the role of knowledge and values in coastal and marine governance. Combining anthropology, feminist STS, and political ecology, she is particularly interested in plural nature perspectives and multispecies relations in marine restoration programs.

Esther Turnhout is the chair of STS at the University of Twente, the Netherlands. She is an interdisciplinary social scientist who studies the relations between science, alternative knowledge systems, society and policy, particularly in biodiversity and nature conservation, and (global) environmental governance.