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Article

The Making of a Conservation Landscape: Towards a Practice of Interdependence

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Abstract

The role of indigenous peoples in the conservation of biological diversity and the role of biological diversity in the lives of indigenous peoples have attracted increasing amounts of attention in the conservation literatures. This interest has led to increasing calls to develop a better understanding of both the complexity and the potential of relations between indigenous groups and Western conservation ideas and organisations. This paper presents a case of landscape making in the Madidi region of Bolivia to take a close look at collaborations and conflicts between various groups—indigenous communities, conservation organisations, and protected area officials. I will demonstrate that these groups have emerged out of a process of creating a shared landscape and that they are *interdependent*—both deeply entwined and radically distinct. Building on recent scholarship, I highlight the importance of interdependence as an active process of becoming, in which the spaces of contact and friction become so complex that the existence of one group is contingent on active engagement with the other. I argue that the concept of interdependence provides a fresh look at histories of encounters and relations in the making of a conservation landscape—uncovering spaces of hope that offer something different for the people involved—and thus can prompt new ways of imagining and practicing conservation in the future.

Keywords: collaboration, interdependence, indigenous communities, NGOs, protected areas, vulnerability, Madidi National Park, Bolivia

INTRODUCTION

The role of indigenous peoples in the conservation of biological diversity and the role of biological diversity in the lives of indigenous peoples have attracted increasing amounts of attention in the conservation literatures (Bohensky and Maru 2011; Painter et al. 2011; Shoreman-Ouimet and Kopnina 2015). Recent synthesis reports and protocols published under international accords, such as the Convention on Biological Diversity and the World Heritage Convention, point to the importance of incorporating indigenous perspectives and knowledges into the wider discussions on global conservation of biodiversity and natural resources (Shoreman-Ouimet and Kopnina 2015; Schmidt et al. 2016; Kormos et al. 2017). These readings emphasise the importance of collaboration and dialogue between mainstream conservation science-based organisations and indigenous communities around the world.

However, as interest in the role of indigenous peoples in conservation has grown, it has also garnered a significant amount of critique from both conservation biologists and critical social scientists (Fletcher 2010). Some conservation biologists have suggested that the increasing focus on people over species has put the conservation movement in peril (Terborgh 2004; Cafaro et al. 2017). Meanwhile, political ecologists and other

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critical scholars have argued that some attempts to incorporate indigenous knowledges and worldviews into the conservation agenda have caused unintentional harm to indigenous peoples by ignoring the power relations inherent in such integration (Bohensky and Maru 2011; Cepek 2011). These critiques reflect the challenges, tensions, and conflicts common to collaborations between such diverse parties (Brockington et al. 2008; Barbour and Schlesinger 2012). However, often missing from many such critical assessments is a thorough description of the shared responsibilities, necessities, and vulnerabilities that bring together indigenous peoples and conservation groups as well as the mutual awareness that their objectives cannot be achieved in isolation (Reo et al. 2017). Thus, it is necessary and important to develop a better understanding of the complexity of such collaborations and to look at the social, ecological, and political landscapes in which they are grounded (Tsing 2005).

This paper presents a case of conservation landscape making in the Madidi region of Bolivia to take a close look at collaborations and conflicts between various groups—indigenous communities, conservation organisations, and protected area officials. I will demonstrate that these groups have emerged out of a process of creating a shared landscape and are *interdependent*—both deeply entwined and radically distinct. Building on recent scholarship, I highlight the importance of interdependence as an active process of becoming, in which the spaces of contact and friction become so complex that the existence of one group is contingent on active engagement with the other. The structure of the paper is as follows: first, I begin with a brief overview of how collaborations and conflicts have been discussed in academic literature in the context of global conservation. I then introduce the concept of interdependence in a conservation context and explain why it is an important concept for rethinking the spaces of conflicts and collaborations between groups with vastly diverse aims. Next, I present an ethnographic case study of the Madidi region in order to show how interdependencies have emerged and evolved amongst indigenous communities, conservation organisations, and protected area officials. Finally, returning to the present-day struggles facing the Madidi region, I question whether previous interdependencies are still relevant and point to ways in which they are changing for the future of both biodiversity conservation and indigenous sovereignty in the region.

INTERDEPENDENCE IN A CONSERVATION CONTEXT

Anna Tsing's seminal book, *Friction*, published in 2005, spurred a great deal of thinking about how collaboration, although fraught with power dynamics, has the potential to lead to the creation of new modes of operating that can shift existing conflicts and landscapes in conservation. She suggests that the critical social sciences need to move beyond focusing only on the imperialist legacies and impositions of the global conservation movement as these writings offer a "historical metanarrative of imperial modernisation in which nothing can happen - good or bad - but more of the same. Familiar heroes and villains are again arrayed on the same battlefield. It is difficult to see how new actors and arguments might ever emerge" (Tsing 2005: 161). Tsing and others use the metaphors of friction and encounters to explore new ways of rethinking how people and groups can be changed through their interactions with one another as well as to harness the space in between different groups and peoples where new things might be possible: "emphasising interconnections as well as conflict and destabilising overly simplistic representations of bounded geographical worlds" (Askins and Pain 2011: 805).

New trends in the critical social sciences have turned a sharp eye towards the spaces between such "bounded geographical worlds", seeking to overcome dualisms taken for granted in Western society, such as between nature and culture, between self and other, or even between matter and spirit (Castree 2013; Pellizzoni 2016). Such approaches, including Actor Network Theory and multispecies ethnography, have effectively demonstrated how things and beings *come to be* through their encounters with the other, with a deep focus on the importance of the non-human or more-than-human (animals, plants, rivers, objects) in these processes (Latour 2007; Haraway 2008; Tsing 2015). Decolonial theories such as political ontology have incorporated these non-dualist approaches when looking more deeply at human-centred worlds and the importance of encounters and "contact zones" in understanding political processes such as landscape making (Blaser 2009; Petitpas and Bonacic 2019). In a conservation context, such ideas have been increasingly important in understanding the conflicts and collaborations between different "worlds" and have helped deepen understanding of how and why misunderstandings arise and projects fail (Blaser 2009; Petitpas and Bonacic 2019).

Some of the most interesting work in this regard comes from work by postcolonial scholars and activists based in Latin America, as Arturo Escobar points out in his new book, *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Escobar entwines the relational notion of "interdependence" with the Zapatista concept of the "pluriverse"—"a world where many worlds fit"—to demonstrate how ideas from non-Western worlds, particularly indigenous resistance movements from Latin America, can shift the ways in which we currently perceive and thus construct our societies (Escobar 2018: xvi). Although Escobar's book is specifically interested in reforming the field of design, his use of the concept of interdependence is important in rethinking other modernist projects such as conservation for two main reasons. First, because it is based on a more radical notion of relationality—"from considering things in interaction to considering things as mutually constituted, that is, viewing things as existing at all only due to their dependence on other things" (Sharma 2015: 2)—which suggests a shift in thinking not only about what comes out of encounters, conflicts, and friction between different groups or actors but also, more radically, how the groups themselves *come to exist* through their encounters with the other (Sharma 2015; Escobar 2018).

Second, interdependence is a relevant concept for exploring conservation collaborations because of its applicability to practice. Thus, rather than being only a theory, it is a "*practice of transformation"* that takes place through "the process of enacting other worlds/practices – that is, in changing radically the ways in which we encounter things and people, not just theorising about such practice" (Escobar 2018: 99). In this sense, the concept of interdependence can be put to use by specifically looking at instances of reliance between groups where such mutual support, even if laden with conflicts and tensions, is necessary for the success or even the survival of each. Writing about the 'geographies of interdependence', Smith (2015) locates the term in various contexts over the last century, making note of its potential utility in finding new ways to think about the complexities inherent in the constantly evolving relationships brought about by global environmental change and geopolitics. Smith suggests that interdependence is a practical tool for thinking more deeply about how we "become" in relation to one another to better understand our relational responsibility:

> "To acknowledge that we live in an interdependent world does not tell anyone how to behave, but it can make them much more sensitive to the wide range of relationships that they are influenced by and in turn can influence. Hence this is a powerful intellectual tool for anyone that wants not only to understand the world, but also to change it for the better (Smith 2015: 4)."

Thus, interdependence challenges us not only to look at social relations within a conservation landscape in a new light but also to reassess the history of these relations by asking certain questions. What does interdependence look like in a conservation landscape? How have the various groups and actors in the landscape, and the landscape itself, become "mutually constituted" through their interdependence with one another, and what might this look like in the future? Can the concept of interdependence help us to see how conservation landscapes can be thought of as a pluriverse, a world where many worlds fit? Can acknowledging the existential relationality inherent in interdependence contribute to "making" conservation a truly decolonial project?

METHODOLOGY

This article is based on fieldwork carried out in the Madidi region of Bolivia using a regional ethnographic approach. Madidi National Park and Natural Area of Integrated Management (NP/NAIM) is spread across 1,895,750 ha and is one of the most biodiverse of all protected areas on the planet (Gorman 2018). The protected area is split into two national parks and one NAIM, is overlapped by three indigenous territories, and is bordered to the east by the Pilón Lajas Biosphere Reserve and Indigenous Territory (Figure 1). Of the 25,000 people living in Madidi's area of influence, 3,741 reside in 31 communities within the boundaries of the protected area (SERNAP 2006).

This study used multiple methods, including semi-structured and unstructured interviews ($n = 137$) and workshops ($n = 12$), and participant observation, between 2012 and 2015, with three main sets of actors: park staff of Madidi National Park and Pilón Lajas; researchers and practitioners at conservation institutions operating in Bolivia; and leaders and members of various lowland indigenous communities in the Madidi region. Additional follow-up conversations and unstructured interviews were carried out with key informants in 2018–2019 to further inform emerging questions, as the current events addressed in this case study continue to be reported in the Bolivian and international media. Interview transcripts, project reports, and field notes were thematically coded with the assistance of the software Atlas.ti version 7.1.8 (2014).

Prior informed consent was obtained for methods. All individual sources have been anonymised. Due to the politically sensitive nature of some of the issues described, additional steps were taken to protect the identities of certain indigenous leadership councils and conservation organisations studied. This decision was taken due to increasing persecution (described later in this paper) by the Bolivian government against groups and individuals involved with various human rights movements, especially indigenous and environmental rights (ANF 2015; CEDIB 2017). During a visit to Bolivia in 2019, I consulted with some of the individuals who I had previously interviewed; these conversations led me to remove the names of groups throughout the manuscript to avoid potential political repercussions[1].

THE MAKING OF THE MADIDI

Colonial and postcolonial landscape making

In 1990, a large US-based conservation organisation hired a team of world-renowned scientists as part of a Rapid Assessment Programme (RAP) in the Madidi region of Bolivia, with the aim of discovering (and ultimately protecting) one of the great biological treasures of the planet in a matter of a few weeks. The RAP, which sought to gauge the diversity of flora and fauna of the region over a period of one month, was unique and novel in many ways—it brought the world's experts in ornithology, mammalogy, and plant taxonomy to a remote region to essentially validate the biological value of the region for conservation (Chicchon 2009). The impact of the assessment was impressive; the then Bolivian government and the World Bank both ranked Madidi as a high-priority site for significant funding. Less than five years after the expedition, Sánchez de Lozada—the acting president of Bolivia at the time—used the conclusions and recommendations of the RAP as the main evidence to justify the creation of a protected area roughly the size of Denmark (Alonso et al. 2011).

There was incredible power in this specific instance of science-based landscape making. It was based on the notion of a pristine "nature" that was not only separate from society but also threatened by invasion from human worlds (Castree 2013). In other words, it was vulnerable and therefore in need of protection. In many cases, this has been an influential metaphor for displacing people across the world (Brockington et al. 2008;

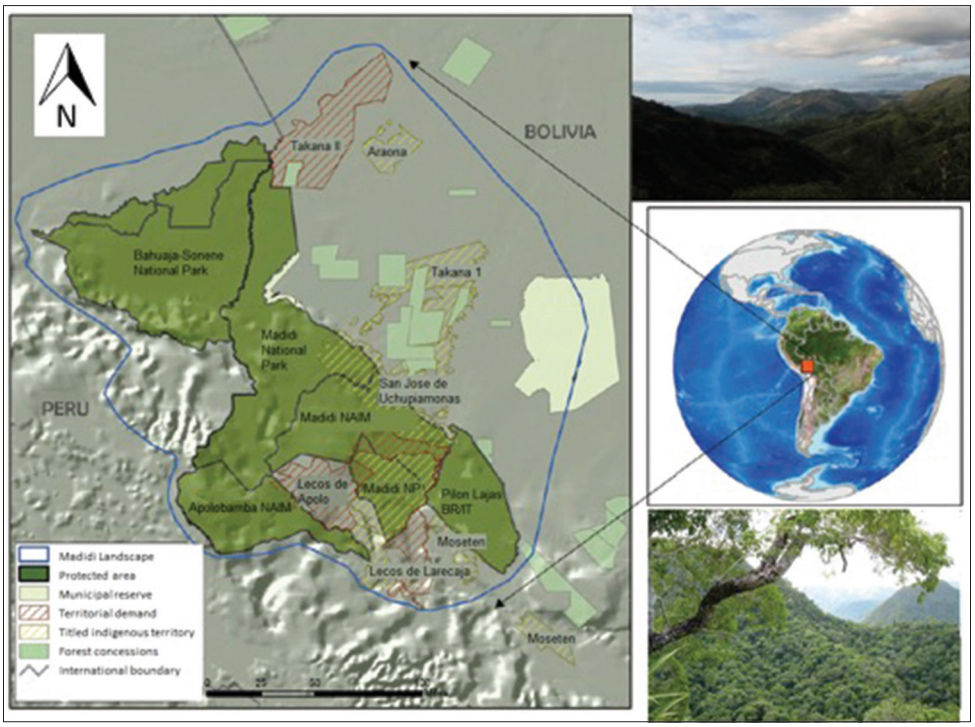

Figure 1
Map and images of Madidi landscape.
Map copyright: Wildlife Conservation Society Bolivia, photos by Anne H. Toomey

Büscher et al. 2017). In the setting up of Madidi, although there was no direct displacement of the 31 indigenous and peasant communities located within its newly drawn boundaries, these communities were not consulted during its establishment. A park guard who had worked in Madidi since the beginning, described the early days:

> I was just finishing military service when they put the call out for park guards in the region. A lot of people signed up for the exam, but the truth is, we didn't know what a national park was and had never heard of things like conservation or 'the environment'… In the beginning, our role was to visit the communities in the Apolo region and inform them that the region had been declared a protected area two years ago. Because these people didn't know. Never had anyone asked them whether or not they wanted to be part of a protected area. The government grabbed a map, saw what the region had to offer, and declared it protected.

This type of landscape making from above was similar to past treatment of the region. Even before colonial times, the highland Aymaras referred to the region to the northeast of Lake Titicaca, where Madidi National park now lies, as 'Umasuyo', which was meant to conjure inferior feminine qualities of humidity, floridity, and darkness, and was in contrast to the superior, dry, sun-filled 'Urcosuyo', where the 'men' lived (Silva et al. 2002). During the Inca Empire, this perception helped justify various military excursions into the region as well as fortresses and roads built with the purpose of exploring and occupying the area (Silva et al. 2002). Intrusions into the region continued with the Spanish colonisers, who additionally sought promises of gold and riches as part of a hunt for the legendary golden city of El Dorado (Lehm et al. 2002). When the budding nation obtained its independence from Spain, the provinces that encompassed Madidi were seen as the 'wild west' of Bolivia, and policies were put in place to encourage an opening of the lands (Lehm et al. 2002; Silva et al. 2002). These policies led to the initial resource booms in the Bolivian lowlands, fuelled by the exploitation of natural resources—first quinine, then rubber, followed by large-scale agriculture through the establishment of patron-owned haciendas, and finally the fur-skin trade of the 1970s and the timber boom that began in the 1980s and that continues even today, albeit mostly in the buffer zones of the park (Forrest et al. 2008; Toomey 2016).

The perception guiding many of these explorations and exploitations was that the region was 'empty' and 'undeveloped', which rationalised the need to bring other (more industrious) peoples to inhabit these lands (Nygren 2000; Gambon and Rist 2018). In the Madidi region, this image was increasingly important towards the end of the twentieth century as the government had encouraged a 'March to the North of La Paz' in the 1970s, which promoted colonisation of the northern La Paz region (Fifer 1982; Bottazzi and Rist 2012). This process, which continued into the 1980s, advanced intensive exploitation of natural resources as the basis for gaining a land title (Bottazzi 2008).

By the time of the Madidi RAP, many outside forces were threatening the biological (and cultural) diversity of the region. Within what was to be the national park, more than 40 timber companies were operating, the vast majority of which were run by outsiders. It seemed that Madidi was something to be fought over—whether by protecting it from the rest of society,

as the early conservationists sought to do, or by developing it as an exciting new frontier for development and economic opportunity.

However, the people native to the region were an often unacknowledged third agent operating in a very active way during this time, alternately resisting and engaging with the state throughout the entirety of the history described earlier. The history of this resistance has been buried beneath a long-held rhetoric that disregarded the Amazonian peoples in Bolivia as a nuisance that retarded the growth of the budding nation—a view that justified those in power to subject these peoples to varying degrees of exploitation and political exclusion (Healy 2001). However, both oral histories and recent writings from the region increasingly acknowledge how these groups asserted themselves through self-imposed isolation and/or violent resistance in dealing with their vulnerability to outside forces—tactics still present in some forms today (Cingolani et al. 2009). Under Spanish rule, another strategy involved accepting a state of dependence on their aggressors by joining settlements and Catholic missions as well as paying tribute to maintain a formal relationship (Platt 1982). This was done for protection because it became clear that only colonial documents would hold up under the new law of the land (Baud 2007; Canessa 2012).

Even after the national agrarian reform of 1952 helped to give indigenous people a certain measure of control over their own lands, the official cultural policies encouraged 'mestizaje' rather than indigeneity, which was meant to spread the Western concepts of civilisation and progress throughout the nation (Healy 2001; Albro 2006). The intensified processes of colonisation and resource extraction in the latter half of the twentieth century had a direct effect on lowland indigenous communities in the region, who saw outsiders invading their lands and removing their natural resources in exchange for low pay day labour. In the 1980s, however, things started to change. Internationally, a discourse about the value of indigenous worldviews and knowledges began gaining traction, connected to certain beliefs that descendants of the original inhabitants of a country should have privileged rights to its land and resources over those from more recently immigrated groups (Kuper 2003). Connected with this, communities that had been part of farming unions since the 1950s began changing self-identities from *campesino* to *indígena* and linking up with biologists and ecologists that were also adopting a pro-indigenous rhetoric as part of their mobilisations to prevent the destruction of the rainforests (Brosius 1999; da Cunha and de Almeida 2000). In 1990, this synergy supported the first march for territory and dignity, in which 600 indigenous people marched almost 1500 km from the lowlands to La Paz to protest encroachment on, and exploitation of, their lands and resources (Healy 2001).

At the same time that Madidi was becoming a protected area, it was also becoming a hotspot of indigeneity—both of these worlds emerging in direct relation to one another. Alongside the consolidation of the protected area system, the decade marked the beginning of an on-going process of indigenous groups in the region obtaining titles to their lands. After the march in 1990, leadership councils of several of the indigenous groups in the region began to emerge. Several new institutions and laws were also set up at this time, including the National Institute of Agrarian Reform (*Instituto Nacional de Reforma Agraria*; INRA) law in 1996, which created the legal designation of 'Tierra Comunitaria de Origen' (TCO) for indigenous peoples across the country[2]. However, the overlapping of TCOs and protected areas in the region was not perceived by all to be a good thing. When the Madidi protected area was first established in 1992, many of the communities sought to defend their lands and traditional activities against what they perceived to be a new form of outsider control. There was great tension due to different ideas about who belonged in the landscape in relation to whom the landscape belonged and what these ideas meant for how people interacted with that landscape. In interviews, both indigenous community members and park guards recounted the early days of the park, when the former chased the latter off their lands with rifles and threats. However, as described above, the social-natural characterisation of the Madidi region was not a coincidence. Thus, it was also becoming a space that could be characterised by the interdependencies between different groups operating at different scales in the region. In other words, Madidi was a "pluriverse" in the making.

Budding interdependencies

Reflective of global trends, in the Madidi region, the notion of compatibility between conservation and the use of natural resources by indigenous communities developed in the 1980s and became firmly established in rhetoric and decision making in the 1990s. This was partly based on the low densities of lowland indigenous peoples, which conservation scientists saw as a necessary condition for the maintenance of biological diversity (Robinson and Bennett 2000). It was partly also due to the persistence of the popular global image of the 'noble savage' as the stalwart steward of the natural environment, which in Bolivia was supported through discussions of the conservation ethic of lowland indigenous communities (Wentzel 1989; Costas 2010; Lehm 2010). The ubiquity of this approach is illustrated in this conversation (as part of an interview) with a biologist who had been involved in drawing protected area boundaries during the 1990s:

> Author: "In Pilón Lajas the protected area is also almost 100% overlapped by the indigenous territory. What do you think about that?"
> Interviewee: "Well, that's Bolivia. That's the way it was designed."
> Author: "Do you think that's compatible with conservation?"
> Interviewee: "Sure. Everybody does."
> Author: "I don't know about that."
> Interviewee: "Who doesn't?"

There was a great deal of overlap among the goals of the leadership councils of the indigenous groups and the

conservation organisations operating in the region, such as the ousting of outsider-owned logging companies and the protection of indigenous lands from increased colonisation by peoples of Andean descent. However, the interests and values that supported these goals were very different. For the conservation organisations, the focus was primarily on the protection of biodiversity, particularly endangered, charismatic species, such as the jaguar or the Andean bear. Although the lowland communities were perceived by some to be a threat to such species due to their hunting practices, their presence on the land offered some measure of protection against more intensive forms of land use (Costas 2010; Lehm 2010; Painter et al. 2011). The alliances with indigenous communities were a means to an end, a sentiment that was reciprocated by the budding indigenous leadership councils, who above all sought control over their lands to advance their own notions of development (Herrera 2005). These councils were being formed out of a necessity created due to the arrival of highland migrants who began to get what they wanted from the national government and local municipalities, in large part, because they were organised. The lowland indigenous communities saw the conservation organisations (and the international power that they represented) as a vehicle to assist them in soliciting political recognition (Healy 2001).

As a result, interdependencies were built on unsteady (and unequal) ground but emerged because each party felt it had something to gain. It was necessary for the conservation groups to team up with indigenous communities—it made sense not only politically and ethically but also ecologically—because the shift in conservation debates began to favour landscape-level conservation in buffer zones rather than the protected-area discourse that had occupied the spotlight in the 1970s and 1980s (Turner et al. 2001). Thus, they evolved both together and apart—not only in the presence of the other, or in relation to the other, but more radically, *because* of the other.

Changing responsibilities

The end of the century marked additional political changes in Bolivia concerning citizenship. In 1994, a new Law of Popular Participation was passed and implemented in Bolivia, which greatly altered the way participation was organised in indigenous communities (Lema 2001). This created a new political configuration in municipalities and indigenous territories, in which a created obligation to operate in non-traditional spaces generated new practices of allocating and exercising power (Herrera 2005). Some scholars have argued that this new scenario was as much related to global trends towards neoliberalism as to claims for increased citizenship (whether by indigenous people or otherwise) from within Bolivia (Albro 2006). Postero (2007) uses the term 'responsible participation' to describe the new demands on indigenous groups in the face of both State and international pressure for engaged citizenship, which required indigenous groups to "speak a particular kind of bureaucratic jargon defined by the new law" (167).

One of the conditions for obtaining territorial rights was to demonstrate historical land use and current 'efficient' appropriation of land and resources. It was within this context that conservation NGOs quickly became aware of 'technical' deficits, which could be used as a clear entry into influencing the conservation and development of the landscape (Bottazzi 2008; Salgado 2010). One of the clearest examples of this has been the alliances between certain conservation organisations and the leadership councils of the various indigenous groups in the Madidi region, where the conservation organisations have helped support new and previous claims to land titles and management of those lands with both legal and technical assistance (Painter et al. 2011). These partnerships also fit into the wider strategies of the national lowland indigenous movement towards 'indigenous autonomy' of management of natural resources. These partnerships were based on the legal need to demonstrate to the Bolivian State that these indigenous groups were fully capable of managing their own territories in a manner that was economically viable, environmentally sustainable, and able to protect the traditional livelihoods, cultures, and beliefs of their peoples. A leader of one of the lowland indigenous councils explains the history as follows:

> We started working with the conservation organisation in 2000 with a formal agreement. I think it was an opportune moment. There was no other strategic ally for us. They have been the ones that have most given economic support for the land titling process and provided resources for the participation of the indigenous people in this process. Because the INRA law says that, for the State to approve a process of land titling, the people have to participate, but we didn't have resources for that.

This quote raises interesting questions about the nature of autonomy in the context of interdependence. Several scholars have effectively argued that rather than emerging in isolation from other societies or ideas, autonomy in the deepest sense is a thorough understanding of one's own distinctiveness in relation to encounters with the other (Rivera Cusicanqui 1990; Escobar 2018). This points to a keen awareness of the changing notion of responsibility held by indigenous peoples in relation to participation in the Bolivian state and beyond, as illustrated in the following quote by a conservationist working in the region:

> The indigenous organisations have a major challenge to face. On one hand, they have to respond to a modern context where they need to present and manage technical information about their management plans because these are the instruments required by them to defend their access to resources and land… not only in Bolivia but also at an international level. Because these are being defined by entities outside of the country—the World Bank, the IMF—that have the power to completely change the panorama of a region. (These entities) are completely technocrat; they operate based on data. The indigenous organisations have to learn how to participate, using this language, because if they don't, they are fried. On the other

> hand, they have to maintain these cultural characteristics that the world requires them to be conserving… Hence, there is a need to maintain a balance between cultural pride, traditional decision-making structures, and the language employed when talking about these issues.

These relations are far from unproblematic. Several interviewees discussed concerns about how the strategic plans of the various indigenous councils often line up neatly with the conservation aims held by the NGOs that provided technical assistance for their development. As a local man once pointed out to me, "Now you see the *indígena,* but he is not on his farm; instead he is walking with his briefcase, and you wonder what workshop he's going to." This comment illustrates the flip side of interdependence and raises questions about cultural identity and the level of influence held by certain groups over others, such as whether the conservation NGOs have succeeded in the remaking of the indigenous councils to fit their own agendas (Cepek 2011). In this sense the interdependencies developing in the Madidi region can be understood as more-than-individual, which relates to the argument made by Smith et al. that "acknowledging that every individual, every place, every community has come about through relations of give and take with other individuals or places or communities points towards a degree of inter-dependence that in many ways defies measurement. It suggests that every 'one' – every individual – contains traces of a great many 'others'" (2007: 350). What is interesting here then goes beyond the *whys and hows* of these interdependencies and looks into the question of *what* exactly they end up producing. To understand this further, however, we need to bring into the equation the notion of vulnerability.

Shared vulnerabilities

At the turn of the millennium, the neoliberal, open market policies of the 1990s had come into sharp conflict with the majority indigenous population, erupting most notably in the early 2000s during protests around water and gas privatisation. Indigenous leadership at the frontline of those conflicts was quickly gaining political ground. In 2005, Bolivia elected for the first time an indigenous president, Evo Morales[3], bringing into power the socialist political party known as *Movimiento al Socialismo* (Movement for Socialism; MAS). Much of President Morales's political message was centred on increasing resistance to the colonial legacy through a continuation of imperialist economic policies made by previous administrations, towards a new plurinational state and the nationalising of the nation's natural resources (Bebbington 2009; Hindery 2013). Much to the dismay of many conservationists in Bolivia, this included a revaluation of the legal status of protected areas across Bolivia, which the Morales administration has argued represents an imperialist kind of conservation (McNeish 2013; Achtenberg 2015; Hollender 2016).

In 2006, one of Morales's first acts as president was to visit a remote village in Madidi and declare the 'nationalising' of Bolivia's national parks, citing corruption and imperialism among the conservation organisations involved in the management of the protected area network (Telesur 2006). This position (and the reactions against it) was clearly evidenced in the divisive and visible debate over the construction of a highway through the middle of one of Bolivia's largest protected areas—Isiboro Sécure National Park and Indigenous Territory, Territorio Indígena Parque Nacional Isiboro Sécure; TIPNIS)—which is also the legal territory of the lowland Tsimane' indigenous group (McNeish 2013). While some have pointed to the TIPNIS conflict as evidence that the government is neither as pro-Mother Earth nor as pro-indigenous as it pretends to be, the Morales administration in turn has argued that their policies can be seen as a resistance to a more modern, greener type of imperialism promoted by conservation scientists and indigenous leaders in the lowland regions of the country (Rodríguez et al. 2007).

In 2013, a law was passed to regulate the NGOs and foundations operating in the country, stating that these entities "must contribute unrestrictedly to the economic and social development of the country… and must not exercise direct or indirect influence or interference in the internal affairs of the country" (Ley 351: 2013). This situation has made the status of NGOs operating in the country—particularly conservation NGOs with international ties—increasingly precarious. Much of Morales's anti-imperialist rhetoric criticises the role of such institutions. This moved beyond mere discourse, with the ousting of a Danish NGO, Ibis, which was accused of actively supporting indigenous groups' resistance to the TIPNIS project (Achtenberg 2015; Ellerbeck 2015; Hollender 2016).

One way in which conservation NGOs have dealt with these new vulnerabilities is to tone down their environmental or pro-indigenous rhetoric, which could be perceived as political / anti-development. Many of the new conservation strategies have focused on small-scale economic development projects, such as sustainable harvesting projects (i.e. organic coffee, ornamental fish) (Painter et al. 2011; Wallace et al. 2017). Part of the collaborative work carried out by these organisations places emphasis on the importance of biological monitoring, carried out by park guards and indigenous communities. In the past, this has focused on the monitoring of bushmeat hunting and fishing in communities along the Beni River (Copa and Townsend 2004). While conservation scientists have described this monitoring in terms of the value of gathering data on population counts of endangered species and as a way to gauge the effectiveness of conservation strategies, other perspectives demonstrate the diverse meanings that monitoring could refer to, as suggested by the following quote by a researcher who previously worked in the region:

> There are people who want monitoring because they want the data… So the reason is to get (the indigenous communities) involved in thinking about the fact that bushmeat is a limited resource. That's the reason monitoring started, however that's not the reason everybody does it. I mean (the conservation organisations) haven't gotten all these communities involved just because they want them to… You've got to consider also the fact of damages.

> Monitoring also helps demand damages… I mean what if they come and cut down the forest? You know you used to get so much game there; sue them. Not that it would help right now, but even if they're not helping much now, eventually, if you have numbers, you may have a chance. If you don't have numbers, you don't.

This is particularly relevant at the present time, as the status of the existing indigenous territories—particularly those in the lowlands—is increasingly threatened due to incursions by other groups, and the revision of the existing INRA law is considered to be pending, neither entirely off or on the table (Pacheco and Benatti 2015). Lowland indigenous councils are perhaps more eager than ever to find ways to mitigate their own vulnerabilities by establishing alliances where they can. For example, the communities have increasingly become more favourable to the presence of the park guards, and in some cases directly reach out via radio to the ranger station to ask for assistance in removing outsiders from their lands (Patzi 2012). The park guards in turn are aware that these actions, however small, contribute to improved relations with the local community members, and without the tolerance, if not support, of the local inhabitants, their job as 'Madidi's protectors' is meaningless. Writing about such relationships between indigenous councils and park guards in the region, sociologist Patricia Costa writes, "more than just a conservationist logic imposed from past times, the alliance has been based on the necessity of protecting both the territory and traditional customs" (Costas 2010: 158). This is the kind of 'shared vulnerability' that Findlay describes: "while some social processes draw lines between 'self' and 'other', producing new vulnerabilities, there are also social processes that connect across cultures and polities" (Findlay 2005: 436). However, this also raises questions about the asymmetrical nature of interdependence—responsibilities are not necessarily shared equally among all and vulnerabilities are not experienced in the same way.

A need for new interdependencies

The earlier section demonstrates how groups that previously had been primarily in conflict with one another can become aware of the responsibilities and vulnerabilities shared between them. This has the potential to lead to a new and productive relationship, one in which each group is increasingly able to understand the crucial importance of the position of the other in relation to their own. However, it is important to be clear about the constantly evolving nature of interdependencies—they are non-static, always changing and becoming reconfigured. New threats to the Madidi are facing the indigenous communities and conservation organisations alike, as well as the existing collaborations between them. This raises the question of whether such interdependencies can continue to be effective, especially when it is becoming increasingly clear that outside forces are actively working against them, and what new interdependencies will arise as a result.

Over the last five years, the price of natural gas has experienced a steady decline while the national deficit has increased; this has caused great concern for the Morales administration (Hollender 2016; Villegas 2018). To compensate, the administration has ramped up both exploration and extraction of natural gas and oil fields and has also begun seeking new sources of revenue in "undeveloped" parts of the country (Diario Opinión 2019). In 2015, Supreme Decree (DS) 2366 was passed, opening the protected areas of Bolivia—previously protected under national law—to the exploration and extraction of petroleum and natural gas (Hill 2015). Madidi and Pilón Lajas are among the protected areas most threatened; three international companies have been granted concessions by the government to operate in 75% and 85% of the area, respectively (Díez Lacunza 2015). Compounding this threat are two planned hydroelectric projects that would flood 771 km of the area overlapped by indigenous groups and the protected areas of Madidi and Pilón Lajas, which would directly displace over 3000 people and additionally have a devastating impact on the ecotourism industry that is a major source of income for the region as a whole (Telma Jenio 2018; Reaño 2017). Seventeen communities comprised of the affected indigenous communities united to form an official resistance movement, called the Mancomunidad de Comunidades (Commonwealth of Communities). In 2017, the collective mobilised blockades out of canoes with outboard motors to block the arrival of employees of an engineering company contracted to carry out the feasibility study (Reaño 2017; Casey 2018). They have actively sought media coverage and attention; in April 2018, one of the main leaders of the movement attended the 17th Session of the United Nations Permanent Forum on Indigenous Issues (UNPFII) in New York City to bring international pressure on the Bolivian government to abide by both Bolivian and international laws for the prior and informed consultation of indigenous peoples in development projects (Telma Jenio 2018).

The Morales administration has been strongly critical of such opposition, which it has sought to discredit as "small groups that get upset, that complain about the environment and the little animals that are going to die" (Morales, quoted in Layme, 2016). One frequent tactic has been to make claims that indigenous leaders and movements to defend land from outside interests are "paid" by NGOs, or that certain indigenous leaders "are no longer indigenous", if they have higher education degrees or own tourism businesses (El Deber 2019). Another approach has been to silence certain voices. For example, the park guards and the administration of the affected protected areas are prohibited from speaking against the proposed development projects, under threat of losing their employment (Reaño 2017; Gambon and Rist 2018). The administration has also created an unofficial "watch list" of NGOs and associated social groups (such as indigenous councils) to curtail collaborations that they perceive as promoting "green imperialist" conspiracies (ANF 2015). Regular rhetoric from the Morales administration serves as a reminder that such NGOs are being monitored, as illustrated in the following quote:

> To all NGOs or foundations that put at risk our exploration of our natural resources, you're going to be booted out of Bolivia. We don't need institutions that come from elsewhere to cause us harm in our own lands (Evo Morales, quoted in El Economista 2015).

Thus, on the surface at least, in some ways, the indigenous peoples and the conservation organisations in the Madidi region seem to be more distanced from one another than ever. However, the importance of interdependencies is not only in the relations that emerge between groups but also in how these relations change the very nature of the groups themselves (Massey 2004; Blaser 2009; Escobar 2018). For example, the indigenous communities who fought the establishment of Madidi National Park in the beginning, chasing park guards off their lands with rifles, are now those defending its protection. Leaders of the Madidi-based indigenous collective have additionally united with other indigenous communities around the country experiencing similar threats to their lands, as part of a new organisation called the National Coordinator of Indigenous Peoples for the Defense of Territories and Protected Areas (CONTIOCAP). The organisation's name—incorporating both indigenous territories and protected areas—reflects the evolution of the interdependencies born in the making of the Madidi landscape.

These interdependencies have also changed the discourses and the practices of conservation organisations operating in Bolivia and perhaps even globally. Within the Bolivian offices of mainstream conservation organisations—traditionally hubs for experts trained in the natural science traditions—a large number of positions are now held by people with training and expertise in social, cultural, economic, and legal issues (e.g., anthropologists, sociologists), some with over a decade of experience working with the indigenous groups mentioned in this paper. In interviews with staff from various conservation NGOs, there was acknowledgement of the need to work on local peoples' terms, which has led to changes at higher levels. For example, a staff member of one of these organisations pointed out that in recent years they have changed the focus of their work:

> We took the decision about two years ago to work more on the organisational support of indigenous and peasant communities… We see that the support of a municipality or a protected area is through the capacity of local actors, who provide their knowledge and interest, depending on the situation. This changes the focus of our work, and it is related to how we work globally. Five years ago, we changed our mission from 'the conservation of biodiversity' to 'nature is essential for people to live better,'—or, 'Living Well', if we are in Bolivia.

This last point challenges unidirectional understandings of impact and highlights the potential and power of "peripheral" communities in the Global South to change institutions, knowledge systems, and policies in the rest of the world (Harding 2006; Sundberg 2006; Toomey 2017). However, these efforts also demonstrate a keen awareness that the existing interdependencies, rooted in colonial and postcolonial contexts, between conservation organisations and indigenous peoples as well as between indigenous peoples and park staff, are no longer enough to ensure the continuation of these "partially connected worlds". New actors need to be engaged and new tensions need to be brought to the surface. For the conservation organisations, an increasingly important group of actors is the new middle class of Bolivians living in urban areas of the country, which previously had little connection with the lowlands due to both geographical and cultural differences (Wallace et al. 2017). More efforts are being made to publish popular press articles that present evidence of the immense number of species documented within the region, seeking to raise awareness about the conservation value of the park and to generate national pride in the area, especially among urban Bolivians (Franco 2016; Wallace et al. 2017; Gorman 2018).

For the indigenous communities, this means looking to global institutions such as the United Nations for recognition of, and support for, their claims of informed consent, and working with a new set of Bolivian actors—lawyers, journalists, and economists who question the viability of selling energy to Brazil in a time when such ventures are fraught with economic uncertainty (Villegas 2018). Thus, the importance of interdependence extends far beyond what already exists; urging us to look at what new interdependencies need to be formed in the future and imagine what new worlds might be created in the process (Massey 2004; Smith et al. 2007).

CONCLUSION: TOWARDS A PRACTICE OF INTERDEPENDENCE

In this paper, I have attempted to show what interdependence can look like in a conservation landscape. By taking a close look at the histories and present-day context of the Madidi landscape, I have used interdependence to describe the relations between various groups and actors in the landscape, even if laden with conflicts and tensions, which are necessary for the success or even the existence of each. The concept of interdependence provides a fresh look at histories of encounters and relations in the making of a conservation landscape—uncovering new spaces of hope that offer something different for the people involved—rather than simply re-enacting long-held and drastically unequal relations of power (Zimmerer 2006). This does not mean that such interdependencies are cosy; however, in taking place in an explicitly postcolonial setting, it can be viewed as "contested, complicated and productively unsettling" (Raghuram et al. 2009: 10–11). Interdependencies are also not necessarily equal or balanced: some responsibilities will be borne more by some actors than by others; similarly, vulnerability means something very different to an international conservation NGO threatened with expulsion than to an indigenous community threatened with disappearance. Thus, while interdependencies do not offer easy answers, they can serve to bring to the light the complexities inherent in shared vulnerabilities

and responsibilities (Smith 2015). "It is in relations of asymmetrical reciprocity that ethical relationships find their feet" (Barnett and Land 2007: 1072).

It is important to note that the case study mentioned earlier could be discussed in much more depth. There are other types of interdependencies that have not been dealt with here (such as the relationship between the Bolivian state and the highland migrants), which additionally shape the past, present, and future of the Madidi landscape. I have not included an analysis of the intricate interdependencies between the human and non-human or more-than-human worlds, which clearly are also relevant for a fuller understanding this region. This discussion would require a more in-depth treatment than is possible in one journal article. It is also important to note that some groups that have not been incorporated into effective interdependencies, continue to be entirely marginalised—such as the nomadic Esse Ejja indigenous people who have lost access to land due to protected areas and surrounding indigenous territories. The importance of interdependence can be understood not only in the spaces where it plays out but also in those where its absence is keenly felt.

However, one of the most important aspects of looking at a landscape through the lens of interdependence is perhaps seeing how the relationships intertwining in this region can instruct us about practice or ways to be in the world. Tsing insists that there is value in exploring collaborative relationships where they exist in conservation:

> Cultural theorists need to know that the variety of nature is an important rural concern, not just an imposition of metropolitan scientists. Conservationists need to know that our knowledge of nature is always cultural knowledge, whether we are scientists or farmers. To be aware of the necessity for careful coalitions with those whose knowledge and pleasure comes from other sources is the *beginning* of a nonimperialist environmentalism (2005: 169–170).

The concept of interdependence challenges the idea that people and movements engaged in modernist projects such as conservation will just morph into different versions of the same, and instead suggests that new things may be happening, even if under the radar. Thus, to accept interdependence as a driving force in our relationships is to accept our responsibility in the creation of new worlds and to acknowledge that we, in turn, are created by such other worlds. Can we re-envision the conservation movement as a pluriverse—one that holds worlds within worlds? Perhaps, by doing so we can contribute to the making of non-imperialist environmentalism that often feels so far out of reach.

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NOTES

1. Anonymisation and pseudonymisation are ethical norms in social science research used to minimise potential harm to participants and ensure confidentiality (Walford 2005; Hammersley and Traianou 2012), and have been the subject of extensive debate regarding research ethics and participant agency (Kelly 2009; Tilley and Woodthorpe 2011). See Saunders et al. 2015 for a deep discussion on how researchers can strike a balance between maintaining richness of qualitative research data and protection of participants through thoughtful practices of anonymisation.
2. All TCOs (*Tierras Comunitarias de Origen*; Peasant Indigenous Territories) were officially converted to TIOCs (*Territorio Indígena Originario Campesino*; Original Peasant Indigenous Territory) according to Article 293 of the Bolivian Constitution, 2009. In practice, however, the denomination TCO still applies.
3. Evo Morales's indigeneity has come into dispute since the election, as part of a larger debate within Bolivia on the differences between *campesino* (peasant farmer), *originario* (native), and *indígena* (indigenous). For a deeper reading on the issue, see Lopez 2010.

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