

Conservation at Stake: Institutionalized Environmentalisms and Indigenous Knowledges About How to Protect the Brazilian Atlantic Forest

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Abstract This paper aims to compare two different sets of solutions on best pathways for biodiversity conservation present in a specific territory in the Brazilian Atlantic Forest, in southern Bahia. We look specifically at three interconnected administrative instances: the Tupinambá de Olivença Indigenous Land; the Una Biological Reserve; and the Una Wildlife Refuge. We show that different perspectives regarding what it means to preserve nature come into focus in this territory. These are intertwined with power relations that highlight the inequality in the legitimacy of different groups in decision making for environmental governance. We map the causes and solutions for biodiversity degradation proposed by two contrasting narratives: the Indigenous perspective and the institutionalized western science-based environmentalism developed by state agencies and non-governmental organizations that work with conservation projects in the region. We expect to equalize these contrasting perspectives that are commonly seen in hierarchical terms. We conclude by advocating for managing combinations of diverse sets of knowledge and for pluralism in conservation efforts that accounts for underlying power relations.

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Introduction

Over the past 30 years, a consensus has emerged about the need to protect what is left of the planet's biodiversity. This globally shared social acceptance opens a multifaceted debate on the best ways to achieve this goal. Taking a Foucauldian perspective, we understand the emergence of 'biodiversity conservation' as the social construction of an object of knowledge and, therefore, a space of power relations (Foucault 1977). Throughout this historical process, different models of practices and discourses have become preponderant. The first global model for conservation, based on the implementation of restrictive and large Protected Areas, came to be known as 'fortress-conservation' (Vaccaro et al. 2013). This model was severely criticized due to the

injustices its implementation created (Adams and Hutton 2007). Restrictive PAs often do not encompass social and cultural heterogeneities, creating negative impacts on otherwise sustainable livelihoods. The consolidation of this critique led to the mainstreaming of more inclusive models of conservation, such as participatory conservation and community-based conservation, that became the global paradigm in the late 1990's. Thereafter, the debate on biodiversity conservation took a polarized form, stressing the role of local populations in conservation: one 'side' advocates for the restriction of access and circulation, and the other recommends community involvement as a solution to conflict (Holmes 2009).

In our perspective, this polarization does not account for the complexity of conservation disputes, in a context where social inclusion is becoming increasingly mainstream. We argue that the construction of viable solutions for conservation could benefit from material attempts at dialogue among diverse groups of people working towards a more sustainable future. Nonetheless, many conservation policies continue to generate situations experienced by local populations as injustices. We understand environmental justice as key for the long-term involvement of those who have been sharing those environments for centuries. Thus, we seek to contribute to a convivial approach to biodiversity conservation (Büscher and Fletcher 2020), that sees the dialogue among different perspectives and radical equity as fundamental tenets for discourse and action to protect ecosystems.

In this paper, we focus on the discursive disputes around biodiversity conservation in a specific territory, relating directly to environmental narratives of those who live in and seek to protect the Brazilian Atlantic Rainforest. We apply a qualitative analysis to compare solutions to the shared problem of biodiversity degradation of the Atlantic Forest proposed by two different groups of people: the solutions developed by Tupinambá Indigenous people and the institutionalized western science-based environmentalism developed by state agencies and non-governmental organizations who work with conservation projects in southern Bahia. We avoid universalizing solutions, trying instead to compare the concrete solutions presented by each narrative. We understand that although indigenous—and other traditional—knowledges have their construction grounded in concrete life experience and not in generalization, they should not be seen as less valid than science-based perspectives (Ingold and Kurtilla 2000). Nonetheless, in conservation planning and implementation so called ‘evidence-based’ (Sutherland et al. 2004) perspectives tend to have more legitimacy, despite the continued efforts toward showing the social and cultural injustices it produces. The solutions provided by more powerful actors in conservation, namely conservation biologists and ecologists that act in academia, NGOs, and state agencies, fail to account for the overlying power relations and causes of conflicts around conservation, including the detachment to local perspectives and excessive bureaucratization (Peluso 2003).

With our case study, we wish to contribute to the ongoing advocacy for more effective pluralism in conservation (Pascual et al. 2021). The methodology based on the analysis of environmental narratives makes it possible to compare and equalize the solutions proposed by representatives of commonly empowered decision-makers in environmental issues and representatives of commonly marginalized discourses. Through the equal juxtaposition of narratives that usually are perceived in a strict hierarchy, we wish to shed light on concrete challenges for mitigating the recurrent conflicts around conservation planning and implementation. We also illuminate the actual possibilities of building alliances between different perspectives. We conclude by advocating for pluralism in conservation, through direct engagement with the proposed solutions offered by on-the-ground agents of Indigenous life and struggle.

The Territorial Contours

The geographic scope of this research is composed by the Tupinambá de Olivença Indigenous Land, Una Biological Reserve (REBIO UNA) and Una Wildlife Refuge (REVIS UNA), located in Southern Bahia, in northeastern Brazil, an area once completely covered by the Atlantic Forest biome (Figure 1). The Brazilian Atlantic Forest hosts one of the world’s most diverse and threatened tropical forest biota of the world (Joly et al. 2014). Only around 26% of its original cover remains (Rezende et al. 2018), with severe defaunation (Bogoni et al. 2018). The South of Bahia is the second largest remaining fragment of the biome in Northeastern Brazil, though it is threatened by intense processes of deforestation related to plantations, mining, and tourism enterprises (Hirota and Ponzoni 2017).

Before colonization the lowlands of the Atlantic Coast were occupied by Indigenous Peoples, mainly from the Tupi linguistic community. Through the colonial period, the lands that today form the Tupinambá de Olivença Indigenous Land were occupied by a Jesuit-controlled Indigenous village. During the nineteenth century, cocoa gradually became the main monoculture for export in the region and the Brazilian state officially declared the ‘extinction’ of the Indigenous populations, authorizing the alienation of their lands (Alarcon 2013). Around the 1980s, cocoa production was deeply impacted both by the spread of pests and overseas competition. The crisis in cocoa intensified

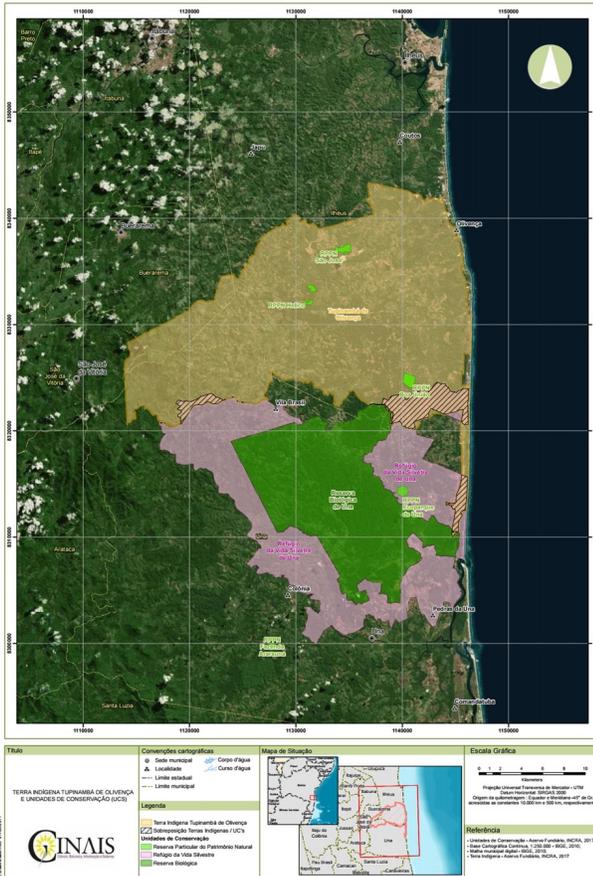


Figure 1 Tupinambá de Olivença Indigenous Land, Una Biological Reserve and Una Wildlife Refuge. Source: This map was produced by the author using official data found in the database of the National Indian Foundation (FUNAI) and the Chico Mendes Institute for Biodiversity Conservation (ICMbio) and follows the delimitation of the Tupinambá Indigenous Land originally published in the “Relatório Circunstanciado de Identificação e Delimitação da Terra Indígena Tupinambá de Olivença” (Viegas & Paula, 2009)

deforestation and impoverishment. Most of the cocoa in the region was planted in a system called ‘*cabruca*’, which consists of a plantation that maintains part of the original Atlantic Forest, to take advantage of shade. Given the low profitability, several landowners, predominantly from white and settler communities, resorted to timber to pay off debts.

At this moment, a conservationist movement emerged in the ‘Cocoa Cost’, aiming to contain the accelerated process of deforestation. In 1994, the Institute for Socio-Environmental Studies of the South of Bahia (IESB) was created and quickly

became the largest NGO with an emphasis on biodiversity at a local scale. This NGO was a main actor in a process of enlargement of the local protected areas network during the 2000s. The Biological Reserve that had been implemented in the early 1980s was enlarged in 2007, giving it 18,715.06 hectares. This process was accompanied by the creation of a new PA, the Wildlife Refuge, with 23,262.09 hectares, functioning as a buffer zone for the Biological Reserve and overlapping with some portions of the Indigenous Land.

Concurrently in the late 90s and early 2000s, a renewed Tupinambá Indigenous movement rose. Reframing their cultural past and present (Oliveira 2018), the Tupinambá enacted certain political strategies, among them, the ‘*retomadas*’ (or ‘*retakes*’): the reappropriation of something that was usurped from the Indigenous peoples in the past. The ‘*retomadas*’ are mainly expressed in the effective occupation of lands and are used as a way to pressure the Brazilian state to ratify Indigenous titles to Indigenous Lands. However, this political-cultural strategy goes beyond the sphere of negotiating rights, constituting a dimension of autonomy for Indigenous movements and the construction of new landscapes. In this sense, they have an ontological dimension since they provoke reorganizations of material and immaterial territories (Escobar 2015). The Indigenous Land is, therefore, the result of an intense political-cultural process performed by the Tupinambá through which they actively take back their land and history (Alarcon 2013). In 2009, the first official map was published by the Brazilian state in which the Indigenous Land consisted of 47,376 hectares (Viegas and Paula 2009). This demarcation, however, has never been ratified by the Ministry of Justice, and thus remains more legally vulnerable than the Protected Areas. Since those processes occurred concomitantly, efforts were made to assure the smallest overlap possible according to diverse expectations (Viegas and Paula 2009). Nonetheless, as we shall demonstrate, the implementation of the Protected Area led to conflicts due to reinforced environmental monitoring experienced as injustices by Indigenous peoples. Therefore, despite the attempt at finding middle ground, the paths for conservation remained disputed and uncertain, since legitimacy for choosing the best paths for biodiversity conservation remained unequal. This makes it important to look at the different proposed solutions for biodiversity conservation and recognize to what extent they have the power to

effectively become a central guidance for conservation.

Methods

Our analysis is based on the comparison of the environmental narratives of two groups: 'Indigenous' and 'institutionalized scientific environmentalism.' Different actors have different access to the discursive power to define what should be understood as environmental degradation, as well as its causes and solutions. In order to approach these power relations, we analyze 'environmental narratives' (see Bixler 2013), understood here as stories bounded by the narrators' particular experiences, observations and attachments to place (Robertson et al. 2000). The narrative concept was used as a tool to compare competing knowledge systems bounded to place, including those based in western cosmologies (Lejano et al. 2013). The selection of materials that could compose such narratives was guided by the aim to access views over an urgent problem shared by both perspectives, namely, "the need to protect what is left of the Atlantic Forest".

The main sources of access to the Tupinambá narrative were 20 interviews conducted with Tupinambá people in 7 villages inside Indigenous territory, and participant observation during fieldwork conducted in 2016–2017, when conflicts between the Indigenous population and local state agencies were unfolding due to environmental fines received by the Tupinambá. The Tupinambá interviewed by the researcher were defined by the coproduction relation between the researcher and two Indigenous leaders. This choice took into consideration gender, age, and territory range, but had the Indigenous people and leaders of communities that were in direct involvement with the disputes around conservation issues as its main criteria.

On the other hand, the set of discursive materials that comprise the institutionalized western science-based environmentalism narrative is linked to the performance of IESB and its partner institutions, due to its prominent role in Southern Bahia and influence in decision-making. In this case, we drew upon 8 scientific papers, 15 project reports, and 10 interviews with members of IESB and the local agents of the national Brazilian agency for biodiversity conservation. Therefore, the second narrative is composed from people's personal experiences and perceptions, as well as the available documents and projects developed by governmental and non-governmental

established institutions that work directly with conservation implementation in the region.

Analysis of the data was conducted through the identification of repeating categories on the materials that composed each narrative related to the causes and solutions for biodiversity degradation. The most recurrent topics became unifying themes that composed each narrative (Charmaz 2006). Each of these unifying themes was systematized in a table per document/interview per narrative and all data was then condensed to the three causes and solutions most present in each narrative. Therefore, drawing from the field work and collected materials, we have identified the general contours of two different perspectives on the same issue, making it possible to compare contrasting perspectives on biodiversity conservation. In the results section, we point out three main causes for the shared problem and its related solutions according to each narrative. Our main objective is to bring into dialogue points of view about the best paths for forest management that have considerable differences in terms of language and social legitimacy, to move closer to plurality in conservation.

Results

Institutionalized Environmentalism Narrative

Traditional strategies for biodiversity conservation have emphasized the creation of intact protected areas, free from human presence. While these areas have enormous potential for conservation, long-term conservation of biodiversity requires the development of an approach that includes the management of buffer zones and biological corridors. (Ayres et al. 2005)

The main argument that stands out in the institutionalized environmentalism narrative is the defense of the 'bioregional paradigm' for biodiversity conservation. The restriction of conservation planning to Protected Areas is considered one of the main causes of the degradation, and the solution would thus be planning on a wider landscape scale (Araújo 2014; Landau et al. 2004; Pinto et al. 2006). Categories such as 'corridor' and 'network of protected areas', are recognized as the basis for biodiversity conservation - especially in the context of the Atlantic Forest. Conservation efforts should be geared towards maximizing habitat connectivity, ecosystems, and ecological processes, facilitating genetic flow, and increasing the chances of species survival. For these



precepts to be followed, scientifically grounded planning is crucial. Geographical Information Systems (GIS) are recognized as a good basis for decision-making because of their ability to provide rapid information on landscape dynamics (Fonseca et al. 2004). By identifying priority areas, the environmentalist narrative proposes a series of solutions that are intrinsically related to each other as part of a coherent discourse.

Solution #1: Actions in Human Occupied Areas and Social Participation

The adoption of a more comprehensive scale for biodiversity requires activities for conservation outside Protected Areas, necessarily including human populations in the equation. The solution proposed seeks to keep the Protected Areas as intact as possible and, at the same time, to work with local communities that inhabit their surroundings. Thus, the inclusion of so called 'social dimensions' is a founding element of the narrative, but this inclusion appears in specific terms. The most relevant publication on the theme produced by IESB aims at "analyzing the opportunities to reconcile economic and conservation use of areas" (Alger et al. 2004:4). The proposition is to generate mechanisms to compensate landowners for environmental services provided, stating that areas with less potential of profitability and greater potential of environmental services should be privileged (Alger et al. 2004). Another form of argument is the need to create participatory spheres for the implementation of biodiversity projects, such as decision committees and advisory councils. In several of the activities carried out by IESB and partners in the region, participatory workshops were implemented, although the profile of the members of these participatory meetings is quite specific: State agents, NGOs, and researchers. Environmental education is another cited path to solve biodiversity degradation, which is presented as complementary to participatory processes. This instrument is seen as a way to change people's behavior by bringing them environmental awareness about the value of inhabiting the surroundings of a biological reserve (IESB and WWF 2004).

Solution #2: The 'Cabruca' Identity

In Southern Bahia, the proposal to carry out biodiversity conservation management on a broader scale is linked to the need to confront the cocoa crisis through a new development model (Araújo et al. 1998). This narrative argues that, in the face of the

lack of financial return of the cacao plantations, the pressure on timber resources increases, mainly in the areas of 'cabruca' agriculture (Ayres et al. 2005; Fandi 2013; Fonseca et al. 2004). Landowners, as a form of economic complementation, may prefer to create pastures in areas once covered by forest or 'cabruca'. The expansion of pastures is seen by environmentalists as the central cause of degradation. To the institutionalized environmentalism narrative, the solution is to encourage organic cocoa plantation, to promote the maintenance of 'cabruca' areas and to stimulate alternative productive activities for local agriculture. In order to justify this point of view, research projects were carried out to demonstrate the occurrence of several species of plants and animals in 'cabruca' areas and its connective capacity between forest fragments (Delabie et al. 2011; SAVE and IESB 2009). It is also worth mentioning that the valorization of 'cabruca' is linked to ideas of a regional identity: the environmentalist narrative points to the social and historical value of cocoa culture, affirming the importance of the 'personality' of the region as a path to an integrated sustainable socio-economic development (SAVE and IESB 2009).

Solution #3: Expansion of the Network of Protected Areas

According to this narrative biodiversity conservation, especially in the Atlantic Forest, necessarily depends on the expansion of the Protected Areas network (Ayres et al. 2005; CI and IESB 2000; Pinto et al. 2006). Advocacy for strengthening monitoring of existing Conservation Units and creating new ones is recurrent. The creation of Private Reserves is also encouraged, although it is seen only as a complementary solution (Araújo et al. 1998; Ayres et al. 2005; Mesquita and Leopoldino 2002). In fact, all solutions are only seen as effective if they are combined with large restrictive Protected Areas, thus forming the basis of the conservation landscape system. Land regularization through compensation payments and the relocation of human inhabitants within Parks and alike is prioritized here (Ayres et al. 2005). On the other hand, these areas are intensely populated by a myriad of non-human living beings. The choice of priority areas for biodiversity conservation is largely anchored in the behavioral patterns of animal species. In all institutional documents, endemism and the risk of extinction of certain species are recognized. The framing of the problem in the institutionalized environmentalism narrative is strongly influenced by threats to certain species, which are often defined



through global indicators such as Important Birdlife Areas (IBAs) and Key Biodiversity Areas (KBAs). Lack of knowledge about the different species is widely seen as a cause for the problem: according to the analyzed documents, the lack of data on the occurrence of threatened species makes it harder to push for more restrictive environmental protection policies.

Indigenous Narrative

Conservation should be like this: you have a whole structure in nature. If you need something, first you have to ask permission for it to be removed from nature, so that you are aware that you have to replant. So if you take one, you replant ten, and when you need another one, you will see that the area is all planted.

Tupinambá Leader in Interview 2017

When field research was conducted, the Indigenous narrative was marked by feelings of injustice in relation to fines for environmental crimes. In the areas of overlap and buffer zones of the protected areas, environmental monitoring is intense, and, in recent years, several Indigenous people have been accused of suppressing vegetation in areas considered 'regenerating forest' in accordance with the Atlantic Forest Law (Lei nº 11428/2006). Unsurprisingly, the Indigenous narrative evidences indignation in relation to punishment for an act that they do not consider to be in any way criminal. The practice of crop rotation is common among the Tupinambá de Olivença and has been used historically (Viegas 2016). In the view of the Tupinambá, agriculture for family sustenance should never be considered deforestation. The Tupinambá understand deforestation as the withdrawal of what they call 'thick wood' or 'hardwood' from areas of 'dense forest' or 'native forest'. On the other hand, what is perceived by the environmental agency as 'regenerating forest' falls within Indigenous categories such as 'arrancador' and 'capoeira'. 'Arrancador' is recent vegetation that grows in lands with little rest time and is generally described 'growing up to three feet from the ground'. 'Capoeira' is vegetation somewhat higher than the 'arrancador', endowed with 'fine woods' or 'white woods', which can be felled 'with machete and ax'. The common point of view of all Tupinambá is that other types of land use should be forbidden in areas described as 'dense forest', since this would mean 'deforestation'. Therefore, most Indigenous formulations on the best

ways to conserve nature are connected to land use according to certain restrictions autonomously decided by them. In the Tupinambá view, there is a clear distinction between a use that would cause 'environmental destruction' and one that would take into account the 'times of nature', taking less than the land can produce again over time.

Solution #1: Recognition of Indigenous Land Claims

In the Indigenous narrative, the main vectors of 'environmental degradation' are large enterprises with high impact capacity. If their land claims could be fulfilled, they believe they would have the power to halt those activities in their territory and therefore become contribute to growing examples of effective conservation on Indigenous Lands in Brazil (Ribeiro et al. 2018). The subject of such activities are variously named by the Tupinambá: the 'outsiders', the 'miners', the 'powerful', the 'non-Indians', or the 'fazendeiros' (big landowners). The impunity of these other groups in relation to activities of high social and environmental impact within the Indigenous Land aggravates Indigenous feelings of injustice about the fines. The 'care for nature', an Indigenous concept that relates to their ability to take care of the 'times of nature' constitutes for the Tupinambá an element of alterity in relation to the non-Indigenous people living in their territory, especially in relation to the 'fazendeiros'. In the Indigenous narrative, the 'fazendeiros' have no relation to the land, because they do not depend on the water that flows through it and on the quality of the environment when raising their children and grandchildren. Therefore, they devastate with impunity. Among the highly impactful activities, the most frequently mentioned by the Tupinambá is sand mining. The sandbanks are seen as disastrous and were named as a main cause to biodiversity degradation by all Tupinambá interviewees. Sand extraction for the construction industry generates enormous craters that, in addition to the deforestation, cause springs to dry up. This directly affects Indigenous families, and often involves the removal of natural fields containing the 'piaçava' tree (*Attalea funifera*), a source of income and an important element of Tupinambá cultural life. Another high-impact activity is the large-scale monocultural planting of coconuts and palm hearts. The Tupinambá de Olivença also vehemently condemned timber logging and the active presence of agents of real estate speculation. In the Indigenous narrative, the ideal environmental solution that would ameliorate all the



framed causes would be confirmation of Indigenous Land titles, which would allow Indigenous peoples to deepen their ties to their territory, encouraging preservation for their descendants.

Solution #2: Retomadas'

The Tupinambá develop, within the areas that come to their management through the practice of '*retomadas*', transformations in the landscape to protect nature. The diversity of actions that are carried out in the '*retomadas*' by the Tupinambá to 'preserve', include: efforts to maintain the 'forest in the spring area'; restoration in pasture degraded areas; closure of charcoal stores; production of several crops in the same space, so that the different species help each other; extraction of raw materials such as '*piçava* straw', '*imbira* shells' and '*aroeira* seeds' used for crafts and/or sale respecting their times of regeneration; among others. The '*retomadas*' are seen by the Tupinambá, especially their leaders, as 'seed-boxes' for actions that point in the direction of preservation. The Tupinambá widely recognize the possibility opened by the '*retomadas*' for more autonomous management of their collective labor and also control over their territory. This ability to organize the work is aligned with the possibility of collectively deciding on the management of the territory, making choices in terms of the varied uses of the different areas based on their own criteria.

Solution #3: Income Alternatives and Educational Seminars

The Tupinambá accept, to some extent, monitoring activities as a solution for environmental degradation, as long as they penalize practices that they consider to be causes of deforestation. Indigenous peoples also point out that the prohibitions, if indeed necessary, could be enforced by them. One of the main concrete proposals in terms of conservation-related public policies, reiterated by a significant number of Indigenous leaders, is the hiring of Indigenous brigade fighters to contain fires and Indigenous rangers to curb deforestation. The monitoring would, however, be carried out in accordance with Indigenous criteria. In addition, the possibility of conducting 'educational seminars' is present in the Indigenous formulation of solutions to the biodiversity degradation problem. The main objective of such seminars would be to open a space for dialogue, where joint alternative land management strategies could be developed, in accordance with collectively established environmental limits. Hunting is a good example of how the limits

are established: for instance, crabs must be larger than a fist to be collected and pregnant females of all mammals cannot be disturbed. It is important to emphasize that, in the view of the Tupinambá, monitoring would only have some effect if accompanied by alternatives to generate sustenance for Indigenous families. In a context of limited financial resources, and in some cases extreme poverty, authoritarian bans do not reach their conservation objectives.

Discussion

When we analyze the solutions proposed by each narrative, we can see resonances and divergences. First, both narratives present themselves as 'counter-discourses', since they challenge dominant perspectives by advocating for the conservation of forest areas: the mainstream perspective on the development of the region advocates for the implementation of plantations, large tourism enterprises, and resource extraction (mining). Both stress the importance of engagement, participation, and environmental education. In addition, both narratives consider the economic aspect and the need to generate income alternatives that are sustainable, albeit in different forms. Those similarities can open paths for joint efforts and could be used as middle ground to develop alliances, for instance, by including the indigenous populations as main beneficiaries of sustainable alternatives.

However, the narratives diverge in relation to the degree of use and integral protection in different areas. The Indigenous statements present some criteria to choose areas for use that would not necessarily be recognized as 'sustainable' by the institutionalized environmentalism. As stated previously, for the Tupinambá, hunting may or may not be a cause of degradation, depending on who does it and how it is done: they recognize a difference between 'Indigenous hunting', that respects limits regarding the time and species that can or cannot be a target, and 'predatory hunting', the irresponsible attack of any of the wild animals by 'outsiders'. In the institutionalized environmentalism narrative, hunting is necessarily a cause of biodiversity degradation in all forms, and it is as a threat perpetrated by the populations surrounding the Protected Areas, since the 'human actions' are recognized in a generic way, without a specification of the groups responsible for degradation. The Tupinambá, on the other hand, recognize that the 'big and powerful', not themselves,

are responsible for the activities that ‘really destroy the environment’ and, therefore, should be contained by law and enforcement.

A dichotomous view of the disputes over biodiversity conservation does not account for the complexity of relations in this case and other territories where conservation is at stake. On the one hand, the *a priori* perception that environmentalist and Indigenous narratives would be mutually exclusive, since the former would tend to overlook environmental justice, can become an obstacle for alliances between environmental actions and Indigenous perceptions on forest management. On the other hand, a vision that sought to recognize an automatic alliance between the Indigenous movement and a ‘socio-environmental’ movement would be equally difficult. Unlike the institutionalized environmentalist narrative, the Indigenous narrative illuminates how processes occur and how they could be better but does not articulate a fixed set of principles about how things should be done. Any coalitions among these perspectives need to take into account this epistemological difference. Several factors give the different groups a greater or lesser capacity to publicly legitimize their perceived solutions for the problem. In the case in question, through political organization, the Tupinambá reach greater capacity to convince other actors and to manage their territories. However, their access to resources for biodiversity conservation is low when compared to institutionalized environmentalism, since most decisions of high impact related to biodiversity conservation in the region were taken in arenas from which they were excluded. The Tupinambá are not an isolated case: conservation policies, even when they seek to address the ethical issue of marginalizing local populations, often reinforce exclusion due to the ontological dimensions that define the different interventions (Moon and Perez-Hämmerle 2022). In this scenario, injustice is aggravated by the power differentials relating to juridical and political authority between the protected areas and the Indigenous land. The Brazilian bureaucracy created a complex, expensive, and hard demarcation process for Indigenous lands, which creates a sort of ‘obstacle race’ permeated by several politicization processes (Mares 2021). The Protected Areas implementation on the other hand, although complex, is rather faster, making it easier for environmental institutions to make their solutions prevail.

Conclusion

The need to address social justice and participation is becoming mainstream, and yet, the overlying power relations still play a role in the actual legitimacy of diverse proposed solutions for concrete environmental problems. The upfront identification of the solutions for the Atlantic Forest proposed by both sides shows that they are equally coherent, and that there is room for bridges between the perspectives. The above-mentioned differences in social legitimacy and territorial effectiveness, however, show the stronger weight of the institutionalized environmentalism in actual decision-making. This case illustrates the importance of recognizing non-dominant imaginaries for the future (Beck 2021). We hope that this can inform contestation of knowledge production and decision making (Turnhout et al. 2019). Current times of accelerated deforestation urge for the formation of all possible alliances and an in depth understanding of knowledge-power relations in each context is crucial to make a fertile ground for that. We argue that our method of making the divergent perspectives as equal as possible can contribute to tackling those power relations. This is a key step to move beyond the perceptions of inconsistency typically recognized by institutionalized environmentalisms on Indigenous and other traditional ecological knowledges (Berkes 2008). Pluralism is needed to contemplate not just the different proposed actions impacting the prosperity of all living beings, but also to recognize the diverse values that guide relations to nature and their implications on the recognition of the main causes behind biodiversity degradation in the first place (Pascual et al. 2021). Just conservation is more effective in long term but can only be pursued through historical reparations (Büscher and Fletcher 2020) that should encompass both dynamics of land dispossession and colonial knowledge structures (Collins et al. 2021).

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