# ARTICLE IN PRESS

Geoforum xxx (xxxx) xxx-xxx



Contents lists available at ScienceDirect

# Geoforum

journal homepage: www.elsevier.com/locate/geoforum



# Re-imagining environmental governance: Gold dredge mining vs Territorial Health in the Colombian Amazon

Camilo Torres<sup>a,b</sup>, Gerard Verschoor<sup>b,\*</sup>

- a Universidad Jorge Tadeo Lozano, Facultad de ciencias Económicas-Administrativas, Cra. 4 # 23-61. Of. 301. Mod. 1, Bogotá, Colombia
- <sup>b</sup> Wageningen University, Department of Social Sciences, Sociology of Development and Change (SDC Group), Postal Code 8130, Hollandseweg 1, 6706KN Wageningen, the Netherlands

#### ARTICLE INFO

# Keywords: Colombian Amazon Andoke Gold dredge mining Territorial health Pluriversal governance Indigenous people

#### ABSTRACT

This article describes and analyses an encounter in the Colombian Amazon between Indigenous practices and arrangements to manage their environment and the conservation policies of the State. Indigenous peoples understand their world as populated by powerful human and nonhuman beings; for them, the moral duty of achieving happiness and abundance for all implies sustaining reciprocal and respectful relations with these beings (including the State). In contrast Colombian environmental policy distinguishes between nature and culture, seeking to safeguard landscapes from human interference so that natural processes can unfold unhindered. In practice these partially connected, yet incommensurable worldviews make for a 'perfect storm' opening opportunities for illegal mining. Drawing on recent fieldwork among the Andoke, an ethnic group well acquainted with extractivism in its different historical modalities and presently affronting the fallout of gold dredge mining we narrate how a parallel, non-state governance system makes it difficult for them to care for their land and entertain mutual and respectful relations with human and nonhuman beings (which we translate as 'territorial health'). We conclude by arguing for the need to re-imagine environmental governance in ways that more closely engage with what we call pluriversal governance: a form of (environmental) governance that does ontological justice to those involved in the environmental conflict – including, crucially, Indigenous people.

# 1. Introduction

June 15, 2015. Deep in the Amazon, the Colombian Navy carries out a tactical air strike against illegal gold mining dredges operating in the Aduche Indigenous Reserve (Fig. 1). Once the smoke of the bombing settles the locals gather to assess the situation: three people killed (one of them the fiancée of a local FARC-EP¹ commander), three dredges sunk, 20 arrests (some of them indigenous Andoke² dredge workers), one seized kilogram of gold, and a few vats of mercury taken by the Army. That same evening Juan Manuel Santos, President of Colombia and later winner of the Nobel Peace Prize, announces that great strides are being made in the war against illegal mining. Next day, dozens of local inhabitants (most of them indigenous Andoke) show up at Araracuara's Army garrison, to demand the release of prisoners. To add weight to the demand the FARC-EP commander threatens to mine the surroundings of Araracuara, Puerto Santander and the military base if

detainees are not freed immediately. Barely a week later, new dredges run by freed convicts again ransack the riverbed. By the end of June, it is 'business as usual' for the mining community.

The episode seems to signal a breakdown in the overall system of environmental governance triggered by the government's perceived need to step in forcefully in order to defend 'unspoilt' Amazonian wilderness from 'irrational', 'illegal' mining. The top-down intervention conceived in far-away Bogotá however ignored on-the-ground issues and led to unnecessary violence and bloodshed without in the end being able to contain the problem. The case is not unique, and is a far cry from the general idea that 'sound' environmental governance interventions are more likely to be effective if they are locally meaningful, supported by a wide variety of public and private actors, and involve a series of regulatory processes, mechanisms and organizations through which a wide range of political actors can influence environmental actions and results for the common good (Baron et al., 2012; Bartel, 2014).

https://doi.org/10.1016/j.geoforum.2020.09.013

Received 9 October 2019; Received in revised form 21 August 2020; Accepted 14 September 2020 0016-7185/ © 2020 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/BY/4.0/).

<sup>\*</sup> Corresponding author.

 $<sup>\</sup>textit{E-mail addresses:} \ camilo.torres@utadeo.edu.co\ (C.\ Torres),\ gerard.verschoor@wur.nl\ (G.\ Verschoor).$ 

<sup>&</sup>lt;sup>1</sup> FARC-EP (Fuerzas Armadas Revolucionarias de Colombia—Ejército del Pueblo). FARC-EP was a guerrilla movement active between 1964 and 2016. It signed a peace agreement with the Colombian Government in 2016.

<sup>&</sup>lt;sup>2</sup> The Andoke are an Amazonian ethnic group of around 450 individuals – the majority of them concentrated in the Aduche Indigenous Reserve.

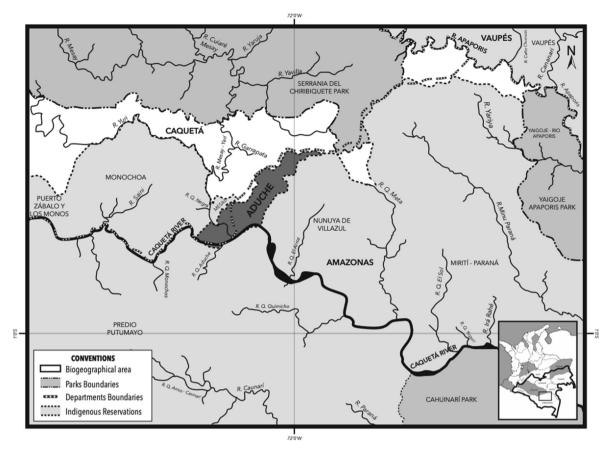


Fig. 1. Case study location. Aduche Indigenous Reserve. Source: Modified by the authors from OPIAC (Organización Nacional de los Pueblos Indígenas). (Source acceded in 20th of April 2020 in: https://opiac.org.co/en-riesgo-la-autonomia-y-gobierno-propio-del-pueblo-indigena-andoque-con-zona-minera-indigena-en-el-departameno-del-amazonas/).

To achieve just this type of 'sound' or 'good' environmental governance a variety of innovative governance arrangements have been suggested, including adaptive governance (Dietz et al., 2008; Folke et al., 2005), polycentric governance (Newig and Fritsch, 2009; Ostrom, 2010a, 2010b) or participatory and collaborative governance (Ansell and Gash, 2008). In general, these governance varieties plea for the inclusion of a larger diversity of pieces of knowledge and perspectives (Bäckstrand, 2006; Blaikie, 1999; Blaikie et al., 1997; Gibson-Graham, 2003) to secure greater feasibility and legitimacy of (government) action as well as to advance social equity and environmental justice. Some of these governance innovations explicitly mention the need to include Indigenous peoples (Brondizio and Le Tourneau, 2016) and to integrate the different ways in which people value Nature (Baud et al., 2011).

These new (environmental) governance forms undoubtedly have their advantages. They are, for example, viable alternatives to neoliberal forms of governance supported by (supra)national environmental policy-making institutions and conservation NGOs that have been much criticized for pushing market-based approaches as universal solutions to environmental problems (Fletcher and Büscher, 2017; McAfee, 1999; Van Hecken et al., 2015). Notwithstanding their usefulness, a shared characteristic of environmental governance processes (both neoliberal or otherwise) is that their definitions of problems and proposed solutions are deeply influenced by Euro-American assumptions, paradigms and research traditions (Leach et al., 2010), and hardly (if at all) discuss ontology, i.e., the nature of the 'what' is governed (cf. van Wezemael, 2008; Briassoulis, 2019). Environmental governance, in the main, thus gravitates around the central concepts of

'Nature' and 'environment' – concepts with a strong footing on Euro-American ontology that are presumed to be universal. Yet these concepts are far from universal and, as some commentators have shown (Latour, 1993; Stengers, 2011; Viveiros de Castro, 1998), they operate on the basis of a 'multiculturalist' understanding of the world: the idea that there exists one single, power-laden reality ('Nature') that can be perceived differently from a variety of culturally situated perspectives – the Euro-American generally being considered the most 'accurate' one because of the (scientific) method it applies to the study of reality.

This is particularly problematic in cases such as the one described above where the main ontological premises of environmental governance (Euro-American style) are not shared by the majority of on-theground actors.. Indeed, in Colombia as elsewhere environmental governance arrangements frequently do not resonate with the problem and solution framings of those who stand at the frontline of resource extraction (often Indigenous peoples). In effect this represents an outright infringement on Indigenous rights; that is, they are assaults of what Descola (2013) calls a 'naturalist' ontology on 'animist' ones. Indeed, for the Andoke as well as for many other Indigenous peoples in the Americas and beyond environmental governance paradigms that operate on the basis of a multiculturalist, 'one-world-world' (Law, 2015) are deeply troublesome: they mirror a profoundly colonial stance that, as a rule, pushes aside Indigenous definitions of problems and proposed solutions - thus rendering invisible, and ultimately silencing, ontological difference (Howitt and Suchet-Pearson, 2006; Sousa Santos, 2004). By focusing on the ontologically-laden processes of environmental governance, our article contributes to what Blaser and Escobar (2016) see as an emerging, third-generation political ecology that focuses not only on epistemological, but above all on ontological issues.

The disavowal of Indigenous framings of problems and proposed

<sup>&</sup>lt;sup>3</sup> This call that has recently been taken on board by The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2019).

solutions in the region of the Colombian Amazon where we carried out our study has historically generated 'perfect storms' that offer opportunities for parallel governance institutions promoted by illegal, mostly non-indigenous actors to take hold. This has been the case over the last hundred years or so through large-scale rubber extraction (and concomitant genocide) based on Indigenous slave labour (Echeverri, 2009), 4 timber and fur trades bonanzas from the mid-1970s through the mid-1980s (Guyot, 1979), and the perhaps even more nefarious production of cocaine from the mid-1980s to the early 2000s (Gutierrez et al., 2016; Thaler et al., 2019) overseen by paramilitary groups who at times used violence against local communities that did not want to engage in 'the business'. To redress situations of state-led environmental governance breakdown or grapple with illegal, often violencebased parallel governance forms in this article we argue that, in contexts involving Indigenous peoples, managing complex environmental problems necessitates some form of what we call 'pluriversal governance' - a form of governance that does ontological justice to Indigenous peoples' worldviews and different ways of thinking environmental problems.

To make our argument, in the next section we first present the problem of mining in our study region, and how we went about gathering data to find the underlying sources of environmental governance breakdown. This is followed by Section 3 in which we describe state-led environmental governance arrangements and the reasons for their evident failure. Section 4 explores Andoke understandings and management of their environment (which we gloss with the concept of 'territorial health') and the causes of it going awry with the relatively recent arrival of illegal gold dredge mining. In Section 5 we provide a glimpse of the workings of a parallel (though illegal) form of governance focused on dredge mining. We end with a concluding discussion in which we present the reasons for both Indigenous and state-led environmental governance failure, and discuss the need for pluriversal governance — a form of governance that does ontological justice to Indigenous peoples' way of understanding environmental problems.

# 2. The effects of illegal gold dredge mining and our methodology

In the Colombian Amazon, illegal, small-scale mining has led to severe if not catastrophic social and ecological consequences. In 2019, over 2.300 local operations affected 83.000 ha and polluted more than 30 rivers (Instituto Sinchi, 2019). A sizable part of these operations, 250, take place within the 207 Indigenous reserves or Resguardos that have been created since Colombia's new Constitution of 1991 and which presently shelter the close to 50 different ethnic groups living in the Colombian Amazon (idem). The main polluting agent is mercury, which is needed to separate gold from unwanted metals.<sup>5</sup> Mercury is handled with bare hands and re-used with home-made burners, exposing miners to toxic methyl-mercury gases which lead to respiratory infections and skin rashes. 6 Methylmercury finds its way into rivers after use and ends up in the food chain, accumulating in many varieties of fish and top-predators as catfish - the main source of protein of the local population. When consumed, methylmercury can lead to Minamata disease (a neurological disorder). In our study region this is very worrying, with levels of methylmercury in human hair surpassing WHO<sup>7</sup> thresholds in 94% of cases in 2014 (Olivero-Verbel et al., 2016).

Dredging also modifies the riverbed, and transforms bluffs and riverbanks through the deposition of sediments which in turn affects terrestrial and amphibious animal species. Because of these transformations (and the perceived dangers of mercury pollution) some Indigenous people have stopped bathing, fishing, or washing clothes on the shores of the main rivers.

Miners prefer not to talk about these things, and instead boast about the earnings that allow them to access electronic gadgets, beer, and carnal pleasures. As we witnessed, in our area of study mining is coterminous with alcoholism and related diseases, spouse-battering, violent conflicts and fights, or the diving accidents that are part and parcel of this world of gold. Women instead openly raise their concerns, and speculate extensively about declining fertility and the spontaneous abortions which seem to occur more frequently after the arrival of mining. They also point to the negative effects mining has on *chagra* (swidden) dynamics: now that their men work 'in the business' and have no time for agriculture women have difficulty providing enough food for their families – thus compromising food security.

The ominous consequences of gold mining begs the question: how is this possible? What are the mechanisms at play behind the failure of environmental governance? To answer these questions we set out to collect data in the Aduche Resguardo (see Fig. 1). Fieldwork there was carried out over six periods between the beginning of 2012 to the end of 2016, with the first and second author coinciding in the field twice in 2012. We carried out about 60 interviews with local people, and recorded stories from gold merchants, Indigenous people (both miners and non-miners), shamans, army officers and local shopkeepers. When not in the field, the first author kept regular mobile phone contact with some of the informants. Apart from our semi-structured interviews we collected data on the flow of everyday life and experience by way of participant observation (Fine, 2015). We kept to the ethical guidelines of our home institutions, following standard procedures and practices, and always obtained consent from of our interviewees (whom we have anonymized for safety reasons). The data we use for this article were translated into English, taking care to keep as close as possible to the gossip, fears, jokes, anecdotes and other affects and emotions which we assume reproduced actors' concepts, livelihood practices, embodied moralities, as well as (in the case of Andoke elders) their perceptions on the relations between human and non-human forest denizens.

# 3. State-led environmental governance in the Colombian Amazon

The Colombian Amazon is probably the best conserved area in the Amazon basin. It counts for 45% of the national land area (roughly 500.00 km<sup>2</sup>). Administratively, the Colombian Amazon is shared by six Departments in turn divided in municipalities and corregimientos (nonmunicipalized areas - more on this below). The vast, continuous forests gather a large spectrum of visions and practices that shape different forms of state-led environmental governance, the largest one being the administrative figure of Resguardos or Indigenous Reserves (55.43% of the area). This is followed by Forest Reserves (16.6%), National Parks (11.84%), areas substracted from former Forest Reserves for the purposes of colonization (7.29%), and a host of other forms (Gutierrez et al., 2016). In practice different authorities are in charge of implementing the politico-administrative organization of the country. In National Parks policies are implemented through the UAESPNN (Special Administrative Unit of the National Parks System). In the Resguardos AATI's (Associations of Traditional Indigenous Authorities) are the formal public entities in charge of resource management. In protected areas outside of National Parks two different environmental protection agencies are in charge of managing terrestrial resources: Corpoamazonia in the Departments of Putumayo, Caquetá and

<sup>&</sup>lt;sup>4</sup> At its peak, in this part of the Amazon rubber was extracted in more than 40 slave camps scattered over more than 60,000 km<sup>2</sup> of dense rainforest (an area roughly the size of England). Uribe (2013) calculates that between 30,000 and 40,000 Indigenous people were exploited, tortured and killed during the heyday of the rubber boom at the beginning of the 20th Century.

<sup>&</sup>lt;sup>5</sup> According to our observations, in dredge mining up to five grams of mercury are needed to obtain one gram of gold.

<sup>&</sup>lt;sup>6</sup> In our study region, Indigenous people working on the dredges would try to hide the rashes under long-sleeved, turtleneck shirts.

<sup>&</sup>lt;sup>7</sup> World Health Organization.

<sup>&</sup>lt;sup>8</sup> These accidents are so commonplace that dredge owners paid fixed amounts of compensation money to affected families.

Amazonas, and the CDA (Corporation for Sustainable Development of the Eastern and Northern Amazon) in the Departments of Vaupés, Guaviare and Guainía. Overlapping areas (nearly 7% of the region) between the sometimes immense *Resguardos*, National Parks, National Natural Reserves and Forest Reserves exist and are jointly managed through Special Management Regimes (REM). On its part AUNAP (the National Authority for Aquaculture and Fishing) is responsible for all aquatic resources. Mining in turn is regulated by the ANM (National Mining Agency), and Indigenous peoples may autonomously carry out mining activities as *Zona Minera Indigena* (Indigenous Mining Zone). Conflict resolution between State authorities takes place at different levels; in cases involving Indigenous peoples a special, Permanent Table of Inter-administrative Coordination (MPCI) has been created for the purpose (with technical assistance from the GAIA Foundation).

State-led environmental governance in the Colombian Amazon is of course not the haphazard outcome of State-Indigenous peoples relations but rather the result of the ontologically inflected ways in which the State has historically framed the problems and solutions of the region. Understanding governance failures thus needs to take into account that the Amazon was, until very recently, seen as Terra nullius awaiting colonization - "[a] land without men, for men who need land" (González, 1997:12), as was the motto of the Ministry of Agriculture in the 1950's - a slogan translated into Laws and Decrees to legalize the exploitation of 'vacant land' as early as 1900. 11 These policies continue to this day through for example the ZIDRES<sup>12</sup> Law of 2016 that propel large-scale land acquisition and legal land grabbing to promote agribusiness, mainly in the so called baldíos or public vacant lands on the Andean foothills and adjacent Amazonian plains (Lugo, 2020). As concerns Indigenous population of the region, these were until very recently seen as coming with the exuberant Amazonian ecosystem their affairs delegated to the discretionary powers of ecclesiastical missions, who in turn received huge amounts of land for their 'effort'. In fact, not until the 1980s (and after huge pressure from national and international ethnic movements) did the Colombian State stop treating Amazonian ethnic groups as anachronistic, non-viable societies.

By the 1970s the Colombian State underwent a complete change of heart as regards its stance towards the Amazon. Policies in support of the wholesale exploitation of natural resources were abruptly turned into conservation policies - even though it maintained its colonization policies in the Andean foothills. The change was linked to an emerging, international 'sustainable development' discourse that gained prominence after the Stockholm Conference (1972), the United Nation's first major conference on international environmental issues. This discourse was directly linked to narratives about a 'pristine' Amazon as the 'lungs of the Earth' – an image that had been carefully but actively crafted since von Humboldt's expeditions in the early 19th century and epitomized by the works of eminent cultural ecologists (cf. Meggers, 1971). In these basically apolitical narratives, Man was seen as the enemy of Nature – an enemy that had to be kept at bay at all costs. <sup>13</sup> As a result of

this 'Nature without People' discourse in the 1970s huge areas of the Colombian Amazon were turned into National Parks (some of them encompassing millions of hectares) and Nature and Forest Reserves. To this day, and even though territorial autonomy has been granted to Indigenous peoples in their *Resguardos*, Law 160 makes it abundantly clear that this autonomy can only be exercised as long it is not contrary to the conservation vocation of the Amazonian bioregion (an entity with formal rights since 2018).

Colombian state-led environmental governance is thus based on the idea that unique bioregions have ecological functions that should be conserved. This idea is strengthened by a further, EuroAmerican ontological assumption about the character of the bounded geographical space that should be conserved and which is best described as 'territory'. In the Colombian Constitution, 'territory' is defined in the politico-jurisdictional sense; that is, as a geographical space the defines and delimits the sovereignty of the Nation. Different types of territories exist; in the Amazon these are the Departments, the municipalities, and the corregimientos or non-municipalized areas. Especially the latter category is important in explaining the failure of environmental governance. Non-municipalized areas do not have the political-administrative status of municipalities because of their low population numbers. Corregimientos lack a municipal council and are administrated by a magistrate appointed by the government of the Department to which it belongs. 14 Paradoxically, according to the 1991 Constitution, corregimientos do not exist: all territories must be part of a municipality. While this situation changed (on paper, at least) in 2018<sup>15</sup> this effectively means that between 1991 and 2018 nearly 40% of the Colombian Amazon found itself in a facto legal vacuum. Since 77% of the corregimientos in the Colombian Amazon overlap with Indigenous Resguardos (Duarte, 2015) this also means that a large proportion of lands governed by Indigenous peoples were not formally recognized by the State and did thus not have the political-administrative power to exercise their territorial vision <sup>16</sup> – a vision that, as we recount in the next section, differs sharply from that of State.

# 4. 'Territorial Health' and its erosion

State-led environmental governance is not the only governance form in the Colombian Amazon. As detailed above Traditional Indigenous Authorities or AATI's are in charge of managing natural resources within the *Resguardos* – even if not formally recognized by the Constitution until 2018. Given that dredging for gold occurs in a socioecological milieu for the most part inhabited by Indigenous people, in this section we describe how Andoke try to steer affairs on the basis of their understanding (however shifting and fluid) of the environment, and the reasons given by some of them to become involved in mining.

To zoom in on the ontological precepts underlying Indigenous environmental governance, in the next vignette we detail an episode in which the first author caught a glimpse of the concept we call 'territorial health' while falling ill. From the field notes:

"Tonight I am struck by a strong stomach ache. I consult the local

<sup>&</sup>lt;sup>9</sup> In these co-management forms conflicts arise because e.g. National Park authorities do not have a thorough understanding of the traditional territory or the shamanic concept of it (Rodríguez et al., 2014).

<sup>&</sup>lt;sup>10</sup> In Colombia no discrimination exists between small- and large-scale mining operations: all need a mining title or mining concession (Law 685 of 2001) as well as an environmental permit (Decree 2820 of 2010). This effectively encourages illegality.

<sup>&</sup>lt;sup>11</sup> An example of this was the titling, in the 1940s, of the Putumayo Preserve (nearly 6 million hectares) in favor of the *Caja de Crédito Agrario, Industrial y Minero* (a state-owned bank). The bank purchased the land from the heirs of the Peruvian Amazon Company, also known as the Casa Arana, which was notorious for its genocidal practices linked to rubber exploitation (Echeverri, 2005).

 $<sup>^{\</sup>rm 12}$  Zonas de Interés de Desarrollo Rural Económico y Social (Zones for Social and Economic Rural Development).

<sup>&</sup>lt;sup>13</sup> The idea of a 'virgin' Amazon was later deconstructed by a range of studies (cf. Balée, 2013; Denevan, 1992; Heckenberger et al., 2003; Levis et al., 2017;

<sup>(</sup>footnote continued)

Martins, 2007; Morcote-Ríos et al., 2013; Watling et al., 2018) demonstrating the Amazon to be, to a large extent, of anthropogenic origin. These finding have had little bearing on policymakers' views.

<sup>&</sup>lt;sup>14</sup> According to Benavides and Duarte (2010) in practice this means that 50% of State cash transfers to Indigenous reserves are 'lost' when executed.

<sup>&</sup>lt;sup>15</sup> Decree 632 of 2018 by which Indigenous *Resguardos* in non-municipalized areas of the Departments of Amazonas, Vaupés and Guainía can become *Indigenous, Territories* – meaning they are part of the politico-administrative organization of Colombia and are empowered to directly administer and execute public and private resources.

 $<sup>^{16}\,\</sup>rm https://www.gaiaamazonas.org/noticias/2019–01-10\_el-decreto-que-consolida-la-gobernanza-indigena-amazonica/.$ 

shaman, Alfonso, who immediately sets out to prepare an infusion of a careful selection of several forest plants. These plants, Alfonso explains, will tell him if my body is 'open' to a healing session: if the herbal mix induces vomiting the body will not yet be ready to heal. I do not throw up, which he takes as a sign that the 'spirit owner' of the coca plant (Erythroxylum coca) is inviting me to reflect and search for the source of my condition and, with his help, find a cure and possibly prevent future, sort-like situations. The first step in this search involves a high and prolonged consumption of coca leaf dust (mambe) during which Alfonso, in his language, softly and cautiously invokes the spirit owner of coca and other forest spirits. After some time (I cannot recall whether these are minutes or hours) the shaman summons me to go sleep in the nearest hammock - my mouth still full of mambe.

I wake up at sunrise, feeling fully recovered. I also feel a voracious appetite which, I am told, I should not pay heed to. Instead, I am instructed to drink water only this day - enough to quench my thirst first, then gradually reducing the dose. As the shaman explains, "this is the same healing method a fish should undergo when it has a stomach ailment". Over the next two days, I question the shaman about the cause of my illness and his diagnosis. To him, it is clear that the disease was transmitted by other entities: I had eaten a fish affected by enemy spirits and this had caused the abdominal pains; this particular fish should not have been caught, much less eaten. His answer surprises me, and I ask: "How can you know that a fish has enemies?". The shaman responds: "Enemies are everywhere. They make you, me, fish or whoever do bad things. The fish you ate was doing bad things and eating things that it should not have been eating - and so came down with a stomach ache which it passed on to you".

The (short) bout of stomach ache threw some initial light on concepts of 'health' and 'environment' that were foreign to us. Probing deeper in meetings with elders and shamans, walks in the forest, dances, food sharing, gold mining, and other spaces shared with the Andoke during fieldwork, we slowly became aware of their more profound meaning – a meaning that was unfamiliar to us and that we argue can best be captured through the concept of 'territorial health' (henceforth TH). At the basis of this notion lies the Andoke's axiom that the reason for existence of all entities in the world (both human and nonhuman) is given by a 'Law of Origin' or Yetara uai/Ka'takadi pisei (Estrada Añokazi, 2017). This Law requires that all entities perform their different activities in accordance to what could be called an 'ecological calendar', and managing human-human and human-nonhuman relations well (in terms of harmony and reciprocity). Good management of relations results in 'abundance' or monifue - a concept that can in turn best be translated by the notion of 'dignified life'. According to the Andoke, abundance is not synonymous to material wealth, but to both material and spiritual wealth and expressed in the ability of the territory to provide food and care for all entities. 'Abundance', in this sense, equals having all that is necessary to live well and in harmony with all forest and river denizens - including their spirit owners. For the Andoke, abundance means the 'joy of living' (literally, the 'force of life' or Toe ya' Posoθ Tu'si) - expressed as a form of collective happiness achieved through dancing, eating and generally being in the cheerful company of kin.

For the Andoke, abundance is closely connected to an understanding of territory as body (*cf.* Echeverri, 2005). Territory, in this sense, is more than a geographical space that can be defined by its social, economic, or environmental characteristics; rather, it is a notion that hinges on the idea of territory as a rhizome dynamically mutating in time and space, where human and nonhuman entities, from the past and the present, from this and from other worlds become entangled in complex webs of (social) relations to organize and shape this 'territory'.

As such, this 'body' has its own needs, appetites, desires, and so on. Importantly, this body may become ill when these needs and desires are not fulfilled, or when an external entity comes to be part of this 'body' in an ill-suited way - in effect eating away at the body from the inside like a cancerous cell that expands and in time affects all organs if not removed in time. Among the Andoke, illness is conceived as a constant threat and manifests itself in the form of pain, indisposition, envy, hunger, madness, anger, conflicts, accidents, impulsive behaviour or weakening diseases. Illness itself can be brought about by witchcraft performed by humans, (mal de gente) or by spirit owners of animals and fish (or other supranatural creatures). In the first case illness affects the individual; in the latter disease affects not only individual humans but can affect the behaviour of whole families, animal populations, or relations between humans and nonhumans. This is expressed in for example changing fish migrations or foraging patterns of game animals, altered growth cycles (and occurrence) of edible and medicinal plants, inconsistent behaviour of rivers, or shifting rainfall patterns (e.g. rain arriving late or not at all in crucial times of the ecological calendar).

To remedy mal de gente, intermediation by shamans or abuelos (elderly people) able to identify the offender (and the behaviour that caused the offense) is called for. In cases where illness affects whole communities of humans or nonhumans complicated negotiations aimed to stop behaviours that are said to distort the health system ensue (e.g. the 'contaminated' fish eaten by the first author). However, the metaphor of the metastasizing, cancerous tissue alluded to above not fully captures the healing capacities of the territory/body. According to our Andoke interlocutors, removal or extermination of the cause(s) of illness are not the only solution: rightful accommodation into the territory/body is also a possibility. For example, White people (once considered to be 'cancerous' cells through Inquisition and the genocidal practices related to the rubber boom) may be assimilated and come to form part of the body in due time once certain practices are 'improved' (e.g. Whites not anymore hunting or indiscriminately killing Indigenous people - as used to be the case). In this sense, a sick body has the capacity to heal itself.

Importantly, the notion of *TH* is not gendered; however, men and women are together responsible for the vitality of the territory, therefore, each gender carries out different tasks. Thus, while men are most often in charge of cosmic relations, women take care of the complex dances and rituals that bring joy and strengthen harmony – two indispensable factors to secure the energy flows between humans and nonhumans which maintain fertility and thus the abundance of food and people (Arango, 1995). When these energy flows are interrupted, *TH* breaks down.

In our research area (the Aduche reserve) gold dredge mining is widely considered to be a danger for *TH*. According to our informants activities in the area started around 2006/7 and increased shortly after the financial meltdown of 2008 when gold prices skyrocketed. Dredge mining was introduced by entrepreneurs from outside the region, and increased rapidly. Thus in February 2012 we counted 14 dredges working a stretch of 25 km between Puerto Santander and the mouth of the Yarí River. By December of that year the number had increased to 34. In May 2015 we were told that 150 dredges of different sizes were operating in this sector, and in December 2015 a total 25 dredges combed the riverbed over a two-kilometre stretch of the Aduche Reserve. <sup>18</sup>

Indigenous Andoke are the largest part of the workforce on the dredges; considering Andoke territorial visions, it is not surprising to find competing interpretations of the activity. The younger generation (especially the males working on dredges) would generally favour the activity – even if sometimes openly recognizing the moral dilemmas

 $<sup>^{17}</sup>$  For the Andoke, as well as for many ethnic groups of the Amazon, the 'spirit owner' is a powerful, supra-human entity that owns and controls animals, or plants, or lakes, or rivers.

<sup>&</sup>lt;sup>18</sup> Between 2016 and early 2020 the numbers appear to have stabilized, but we expect numbers to again rise sharply with gold prices going through the ceiling as a result of COVID-19 related global financial uncertainties.

involved. For all people involved in 'the business' the most important driver is money. In 2016, an average worker would make (depending on the time of year, the place, and workers' skills) between 300 and 550  $\rm USD^{19}$  in 48–72 continuous working hours. In this timespan workers would fetch between 40 and 80  $\rm g^{20}$  of clean gold. A young Indigenous informant put it thus:

"This job has given me a lot of money. It has given me the things that other jobs would never have given me [waving a cellular phone as a trophy]. The only downside is that my head sometimes hurts and also my eyes burn a little."

In general, most adult women and men would be adamantly against mining. This sometimes leads to (open) inter-generational conflict – to the point that youths can be expelled from their parental *maloka*<sup>21</sup> when involved in mining. Elderly shamans or *abuelos* in turn put forth additional reasons against mining such as changing relations with water entities (as evident from the fish story in the vignette above), animals and forest spirits. Some elders narrated that revengeful animal spirit owners would sent 'infected' game into the forest; consuming this meat would make one highly prone to drowning accidents. Or, as an older *abuelo* told us, these same spirits would just decide to take it all back:

"The animals went away and it is now very difficult to find salados<sup>22</sup>; some of them simply disappeared and have not been seen since. Without animals there is no food; there is nothing."

Likewise, we were told that the spirits owners of cassava and banana were annoyed, changing their flavours and availability. Senior Andoke also stated that the arrival of foreign diets (e.g. rice, candy, chips, canned food) that became accessible through mining offended spirit owners of animals and plants who felt their food offers were being turned down (*despreciados*) – a clear sign of miss-appreciation that was punished by the arrival of envy, pettiness, <sup>23</sup> apathy, sloth or alcoholism. Healing these situations, in turn, had become difficult as mining had eroded the rules of cosmic conduct, affecting the 'discipline of coca and tobacco' and weakening the very channels through which curative powers trave. As Yanai – a well-known shaman of the People of the Center<sup>24</sup> - put it:

"We shamans have been chosen and trained to run the world (manejar el mundo). We have inherited our tasks from our shamanic ancestors; it is us who must ensure that there is abundance, that there is happiness, that there is no war, that there are no illnesses. Since all layers of the world are energetically interconnected we need to see to it that energy flows between the layers is not interrupted. This spiritual energy comes from our sacred places, and we need this energy to communicate between

different layers! We the Jaguars of the Yuruparí [shamans] for example communicate with one another through the mineral layer. For us, gold is the path of thought. Or let me put it to you this way, so you understand: gold is our internet. Mining interrupts our communication channels, and without communicating with the other shamans: how can we collectively care for our territory? How can we heal it?"

Asked whether the State should or could do something against mining, another *maloquero* (shaman) retorted categorically:

"What can we expect from the State? The State changes its mind all the time. First it tells everybody: 'develop those lands of the Indians!'. The next minute it says: 'conserve those lands!'. Who can guarantee us that it won't be something else next year or next decade? We cannot rely on the State. It is us who have the millennial task of managing these lands according to our laws of origin. It is us who must stop mining'.

As Yanai's and other elders' stories suggest, a 'perfect storm' induced by mining was in the making. The millennial task of caring for land and of ensuring territorial health was in peril. A time-honored moral economy was being disrupted by time-limited, changing state policies and a parallel form of governance focused on gold extraction. In the next section, we offer a cursory glimpse into the *modus operandi* of what could be called 'dredge governance'.

#### 5. Gold dredge governance in the Aduche Indigenous Reserve

In the second week of June 2015 we arrive (together with a university colleague and a few students) in Araracuara with the biweekly, twin-engine Dornier that connects Bogotá and this part of the Amazon. An Army battalion of around 500 soldiers is stationed next to tarmac airfield, and a few of them are in charge of inspecting the 22 passengers (and the pilot). We know they are putting up a show: none of the soldiers would ever venture out of the heavily-protected garrison (15 layers of sandbags) and airfield in fear of being hostigados (fired upon, that is) by FARC-EP guerrilla. We also know that a host of different governance schemes coalesce in this beautiful place to legally protect it: a couple of Indigenous Resguardos, two Departments, two different environmental protection agencies, the country's largest Forest Reserve, a phoney Indigenous Mining Zone, a municipality, a non-municipalized area... We also know that this is a place where, for a variety of reasons (a weak presence of the State, ominous guerrilla activity, powerful local and extra-local mining interests - to name the most important) the law of the strongest rules. We are entering what the CIA<sup>25</sup> and international Foreign Affair Ministries call a 'Red Zone'.

After a 45-minute walk down the granite plateau that serves as both airstrip and Army garrison we take a little barge to cross the mighty Caquetá river. On the opposite shore Puerto Santander welcomes us. Here we will buy errands, coordinate our fortnightly stay at the Aduche Resguardo, and confirm the return ticket to Bogotá. Walking towards the shop where all three things can be done at once we notice a number of new businesses that weren't there on our last fieldtrip. In one of them a billiards room - some men we do not recognize are playing and drinking beers. Upon seeing us, one of them instinctively pulls out a mobile from his pocket and dials while keeping his eyes on us. His reaction intimidates us: it clear that he is monitoring the situation and reporting who knows what to who knows whom. We continue to the shop. The caller can still see us, but his mobile is back in his jeans and he now appears to play calmly, only sporadically watching our movements. The shop owner (whom we know) greets us, and invites us to some drinks while remarking in passing that he already knew we were on today's flight and need to buy groceries and gasoline to go to Aduche - our destination.

Apart from the phone call, our welcoming to Puerto Santander has

<sup>&</sup>lt;sup>19</sup> In 2016 the official minimum wage in Colombia was 270 USD.

 $<sup>^{\</sup>rm 20}\,1.3\text{--}2.6$  troy ounces. In 2016 a troy ounce of gold averaged 1.500 USD.

 $<sup>^{21}\,\</sup>mathrm{The}\,\textit{maloka}$  is a large, traditional dwelling. It is used for both domestic and ritual purposes.

<sup>&</sup>lt;sup>22</sup> A salado or saltlick is an important breeding and feeding place for some animals, especially for tapirs and other ungulates. For the Andoke saltlicks are sacred places that may change location when over-used.

 $<sup>^{23}</sup>$  Pettiness or *mezquindad* is a term widely used by the Andoke to refer to situations in which money is treated as an individual good and not distributed generously and collectively – as local moral values centred around reciprocity dictate.

<sup>&</sup>lt;sup>24</sup> Many Amazonian ethnic groups consider themselves to be part of the 'People of the Center': Andoke, Uitoto, Muinane, Miraña, Bora, Yukuna, Nonuya, Yuri, Passé, and other (smaller) groups – some of whom dwell in the interior of the Amazon and live in voluntary isolation (Franco Garcia, 2012; Londoño Sulkin, 2017; Pineda, 1990; Seifart and Echeverri, 2014; van Der Hammen, 1992). These groups share a common linguistic origin, hierarchical structures of clearly defined lineages, as well as political views on the administration and management of their territories. According to archaeological evidence, the 'People of the Center' have lived in this area of the Amazon for more than 6.500 years (Morcote-Ríos et al., 2016).

<sup>&</sup>lt;sup>25</sup> Central Intelligence Agency.

nothing out of the ordinary. We know the shopkeeper is involved in mining activities, has access to information about who comes and goes (he is the sole airplane ticket agent in the region) and sees to it that this information is spread 'to whom it may concern'. Later in the afternoon we meet Don Nelson from Aduche who will take us to the Resguardo with his Jon boat. He greets us and tells us that (indeed!) "everyone in the place already knows you're here and that you're professors and students, so no-one has made a fuzz about us going down the river". On a later occasion Don Sandro - shopkeeper in Araracuara, links to FARC-EP, undisputed local mining kingpin - told the first author that all movements by 'outsiders' were quickly reported to him and others by locals, and that within half a day most people in the region already knew who was where, doing what, and with what intentions. This 'networky' form of coordination is crucial to take timely 'precautions' and 'management measures'. In fact, actors involved in illegal activities spend a large amount of time putting in place reliable information systems and using chat services, and are willing to invest large amounts of money to make this possible (e.g. through the financing of a large telecommunications antenna in 2016 to significantly improve cellphone signal in remote areas).<sup>26</sup>

As we try to make clear above illegal gold mining and its consequences are not the automatic outcome of the failure of state-led and Indigenous governance forms. The failures do however open a window for a diversity of individuals and organizations to exercise their agency and opportunistically make use of the circumstances - often in complicity with influential social networks that include regional and national politicians as well as representatives of (armed) illegal groups. This does not mean that illegal activities in these liminal spaces are easy or straightforward. Let us again turn to Don Sandro, for example. Don Sandro arrived in the early 2000s from Florencia, the capital of the Department of Caquetá, but has been linked to political, economic and social activities in the region for over 30 years. Since he previously ran for mayor in the municipality of Solano (Department of Caquetá), he can count on the support of an important national political party known to have (or have had) links with illegal activities of all sorts - some members having been convicted for this. Now consolidated as an influential entrepreneur, Don Sandro knows the ins and outs of all illegal extraction activities past and present, and likes to boast that he has actively participated in several of them - from hunting endangered species to drug trafficking. Don Sandro has a wide business portfolio: he owns grocery stores and adult entertainment centers in larger cities, and imports food and other goods into the region either with the regular, weekly cargo flights from Bogotá or by dinghy from Florencia to Puerto Solano and from there with carriers and mules to Araracuara. In addition, Don Sandro owns several mining dredges operating along the Caquetá River, and has the support of the local population (his workforce). One evening, while killing time in front of his porch, he casually mentioned some of the 'problems of the trade'. He kept repeating: "It is easy to wake up dead here" or "at any moment I could be killed". For example, revealing his anxiety vis-à-vis Indigenous peoples (whom he needs yet despises), he commented:

"This region is very rich in natural resources and for decades I have seen many [Indigenous] people make money, but it has not been possible for them to improve their living conditions... The Indigenous [population] does not have a business vision... they know that you have some extra money and want to take it... It doesn't matter in what way or with which method."

The next morning the first author witnessed an incident that illustrates the dangers involved in 'the business'. Showing a text message on his cellphone, Don Sandro exclaims: "Look at this! They [FARC-EP] are

extorting me! They are asking me a million-and-a-half for this order [vats of mercury] from Brazil!". The text message leaves no doubt: the money needs to be paid that same day – or else. After a while, he confides:

"I am very tired of all this, everyone wants to take my money... my plan is to leave this godforsaken land because I am sure that this business will be short-lived and will soon stop being good for me... This bonanza is not going to bring us anything good, and this abundance of gold is going to be the downfall for all of us."

After his 'errand' Don Sandro discloses that, paradoxically, he clandestinely provides food, drink and other necessities to another Front of the same organization that extorts him...

Conflict and lawlessness seemed to be commonplace in 'dredge governance', and permeated all nodes of the chain we were allowed to observe. In fact, a simplistic way to explain the inability of state-led and Indigenous governance forms to contain illegal mining is the capacity of this parallel governance form to instill fear (and hence compliance). Living in fear of being "killed at any moment", as Don Sandro put it, was a tribulation many had to put up with. Thus smugglers bringing in mercury from Brazil awaited in anxiety whether or not those levying 'taxes' on 'their' part of the river (FARC-EP, criminal organizations) would honor prior agreements; workers on dredges were scared of being accused of stealing a gram or two (which they often did) or passing information to outsiders; carroñeros<sup>27</sup> never knew how to stay away of harm's way; prostitutes were terrified of males in a drinking bout soliciting their services. One could literally smell fear and death in these territories - all enshrouded in a code of silence. In Aduche where money was to be had with such ease - the stakes were high indeed. A veritable concert of Laws, Decrees, and policies had miserably failed to make this a safer place.

# 6. Concluding discussion

This article describes how (illegal) gold dredge mining in the Colombian Amazon ensues from a failure of environmental governance. How is this possible, we ask? To answer the question it is useful to think of environmental governance not as a unitary process but rather as multiplicity (Briassoulis, 2019); that is, as a multitude of rivalling governance forms aiming to steer collective action. As we have seen above in our region of study three different but not unrelated modes of existence (Latour, 2013) co-exist next to one another. All three modes are built on very particular ontological assumptions which in turn give rise to very specific, issue-oriented forms of governance. A first strand of governance arises from a naturalist, multiculturalist ontology focused on conservation; it is (mainly) performed by the institutions of the Colombian State. A second form is based on an ontology of care, oriented to what we call 'territorial health', and enacted by Indigenous people exclusively. A third one is centered on an ontology in which money and quick rewards are seen as the highest goods; this form is pushed by non-local entrepreneurs, and acted out by Indigenous people who have turned their backs on the local moral economy. As we detailed above the first two governance forms fail dearly; the third tri-

State-led environmental governance fails, we argue, for four reasons. The first is that Colombian Territorial Ordering (and the governance forms it allows) is built on contradicting paradigms ('development' versus 'conservation') that draw their justification from totally different, EuroAmerican discourses in which Man and Nature are opposed entities. Thus state-led environmental governance limps on the

 $<sup>^{26}\,\</sup>mathrm{While}$  the military can in principle access all information channeled through the antenna, illegal actors made sure their messages were sufficiently codified to hinder easy detection.

<sup>&</sup>lt;sup>27</sup> Carroñeros or 'vultures' are small rafts on which 'independent' workers select mercury-laden sediments often still containing unamalgamated fractions of gold discarded by larger vessels. Carroñeros are a source of conflicts as they fight between them to access these sediments.

thought that the Amazon is *Terra nullius* and should hence be developed by/for agribusiness *and* the thought that the Amazon is a pristine wilderness that should be conserved. Understandably, this creates disorientation among Indigenous people – a confusion that often translates into distrust and a perceived lack of State legitimacy. A second reason has to do with the geographical, bounded notion of territory entertained by the Colombian State, and which is at odds with Indigenous, shamanic concepts of it. Third, failure has to do with the politico-juridical status of non-municipalized areas (where most *Resguardos* are found), and which creates a legal vacuum in 40% of the Colombian Amazon. Finally, an important reason is that the Colombian State is unable to stop the high levels of violence that are characteristic of its rural areas, and that have in fact increased in the post-conflict era. This is (partially) due to a weak presence of the State in the vast expanses of the Amazon.

Indigenous governance on its part falters for a number of reasons very much related to the causes of state-led governance failure. The first one concerns the legal vacuum created by the constitutionally non-existent figure of corregimientos (which shelter the majority of Amazonian Indigenous Resguardos), and this directly hinders Indigenous Authorities in the implementation of their territorial visions - visions of territory that contrast sharply with those of the State and prevent them from taking autonomous decisions concerning the well-being of their people. A second but significant explanation we offer for the demise of Indigenous governance has to do with the ever-present threat of violence that can be exercised by groups involved in illegal mining. While we did not hear of assassinations of Indigenous people opposing mining during fieldwork, it is no secret that that this is a real possibility.<sup>2</sup> Formal institutions, including the military, are currently incapable of guaranteeing the safety of Indigenous 'activists' defending their territories against organizations that have put in place parallel governance structures that perform state functions and compete with the Colombian State - to the point of sometimes displacing it. 29 A third explanation we offer has to do with Indigenous peoples' desire to obtain commodities of mass consumption. Since the advent of telecommunications, DVD's and the like a few years ago, Indigenous people in our study area have been exposed to a rich culture of consumerism even when the advertised commodities are not available at all and even if few would have the means to acquire them. The ever-renewed desire created by the media is bolstered by the ostentatious usage of (expensive) gadgets such as iPhones, smartwatches or expensive clothing by mining entrepreneurs, and makes Indigenous people go to great lengths to achieve what they wish - even if knowingly jeopardizing territorial health. "Capitalism", as French sociologist Pierre Bourdieu used to say, "works by seduction". It certainly does so in the Colombian Amazon.

As is evident a certain overlap of reasons exists. So perhaps using large-scale terms such as 'state-led environmental governance' or 'Indigenous governance' is profoundly inadequate because of the danger of reification i.e. that explanations for failure must inevitably be found in each dichotomous half - which we clearly cannot. Yet to not use these large-scale terms would be to misrepresent important differences and underlying struggles such as, for example, the social mobilization of Indigenous communities in the 1970s and 80s that resulted in the consolidation of powerful and influential local, regional, and national ethnic organizations, the acceptance of Indigenous thought as

a source of political thought and, ultimately the recognition of Indigenous rights in the 1991 Constitution (Gros, 2000). So when we use such 'reductionist', large-scale terms we do so, following Østmo and Law (2018:351), because it is analytically and politically important "to index asymmetrical patterns of significant difference between particular state and local environmentally relevant practices". Thus we find it important to write that Indigenous governance indexes a world populated by powerful human and nonhuman beings in which it is a moral duty to achieve happiness and abundance for all by sustaining reciprocal and respectful relations with these beings (including the State). And we find it equally expedient to state that state-led environmental governance points to arrangements that distinguish between nature and culture, seeking to safeguard landscapes from human interference so that natural processes can unfold unhindered. Having said this, though, we still want to argue that state-led environmental governance is highly variable - and changing. It is, following Mol (2002), 'more than one, less than many' in that different versions of the environment also overlap in governance practices. Importantly, State-Indigenous relations have been imbricated in a centuries-long predicament; they are, speaking with Strathern (2004), 'partially connected': one is included in the other - but neither is reducible to the other (Law, 2004). A comparable argument applies to the (large-scale) term 'Indigenous': indigenous practices are highly variable, and there is no such thing as an essential, unchanging 'Indigenous culture'. In our specific case, and despite their relative geographical isolation, Andoke ways of living are diverse and have changed historically with the arrival of money during earlier resource bonanzas, the introduction of boat engines, and the (relative) integration into market economies. Likewise, the relation between Andoke and (mostly) White and Mestizo settlers is one of longterm reciprocal (albeit asymmetrical) entanglement, most speak Spanish as a consequence of colonial history, and some youth would have difficulty in recognizing the practices or vocabularies of shamans.

How to deal with failure is, from our perspective, the central element of environmental governance. Since failure can, in our case, to a great extent be attributed to a clash of ontologies it follows that the challenge of designing successful environmental governance amounts to the question of how to craft ontological encounters well. We here plea for an ontological turn (Holbraad and Pedersen, 2014)30 in environmental governance practice; that is, the need to overcome the dualist epistemologies that separate humans (culture) from nature and then seek to achieve a kind of integration of humans in (pristine) nature. This means taking seriously Indigenous ways of relating to their environment in the framing of environmental problems and solutions. There is, we believe, a dire need to put in place processes of what we would like to coin pluriversal governance: a form of governance that does ontological justice to those involved in environmental conflict including, crucially, Indigenous peoples and their concepts. Indeed, concepts originating from different (invisible, made absent, silenced) worlds could positively affect locally situated, environmental conflicts if admitted as fully-fledged members of environmental governance lan-

Proposing pluriversal governance begs the question whether different worlds or ontologies are commensurable or not. At first sight, state-led and Indigenous governance forms seem to be incommensurable. From the outside, it looks as if they would be bumping heads, and

<sup>&</sup>lt;sup>28</sup> In its latest report, Global Witness (2020) mentions that in 2019 Colombia had the highest number of killings (68) of environmental activists in the world. Half of these activists were Indigenous people.

<sup>&</sup>lt;sup>29</sup> To provide an example: on the 24 of February 2020, dissident forces of FARC-EP occupied the Visitor Centers of all but one of the Colombian Amazon's National Parks. Dissidents took all boats, engines and communication infrastructure from the Centers, and National Parks personnel was given 24 h to leave the area – or else (personal communication, Cahuinarí NP Warden).

<sup>&</sup>lt;sup>30</sup> The'turn to ontology' in the social sciences is hotly debated. While a deeper treatment of this critique is beyond the scope of this article, controversies range from methodological concerns of how to conceive and describe radically different Others (Vigh and Sausdal, 2014), to philosophical anxieties of how to deal with the relativism entailed in shifting from 'multiculturalism' to the idea that many 'worlds' co-exist next to one another (Palecek and Risjord, 2012), to worries about the (negative) political implications of the 'ontological turn' (Graeber, 2015) - especially as this extends EuroAmerican scientific colonialism (Hunt, 2014; Todd, 2014; Sundberg, 2014). We partially agree with these critiques.

any attempt at translation would seem to immediately fail as ontological assumptions and knowledge practices are just too different to be brought together. But from the inside the picture is different: as we already hinted, Indigenous and non-Indigenous worlds have been imbricated for centuries, yet the conditions under which each world is composed are incommensurable; they are, in effect, partially connected. Commensurable, yet different. This, we argue, opens the door to dialogue.

So how would pluriversal governance work in our case? First, by opening up the question over what is to count as the 'object of governance', and insisting on environmentally relevant difference in the context of asymmetrical entanglements between Indigenous peoples and the (supra-) national State (Østmo and Law, 2018). Second, by insisting that Indigenous people are entitled to take their spirits and other nonhuman paraphernalia with them to governance negotiations – and not asking them politely to leave them on hooks in the cloakroom before entering the negotiation room. This amounts, at all times, to listen to different point of view and reflexively deal with the political task of anticipating, as far as common sense allows, the implications of jointly made (and negotiated) governance arrangements. On other words, one needs, following Haraway (2007), to show some conceptual politesse here.

We are aware that this is a daunting task. Pluriversal governance is about the active shaping of a common world; as such, it is very much a 'learning-by-doing' process. The caveat here is that the common world should not be confused for the common ground: after all, as Spinoza said long ago, it is difference that makes us think. Pluriversal governance means finding ways to do difference together – to think together instead of assuming we all have something in common and reach closure prematurely. Doing difference together means going deeper into the encounter, into the experience of difference.

#### CRediT authorship contribution statement

Camilo Torres: Conceptualization, Investigation, Methodology, Project administration, Resources, Visualization, Writing - original draft, Writing - review & editing. Gerard Verschoor: Conceptualization, Investigation, Methodology, Resources, Supervision, Visualization, Writing - original draft, Writing - review & editing.

### Acknowledgements

The opinions contained in this document are the sole responsibility of the authors. We want to thank all those entities (human and non-human) who watch over the territorial health of the Amazon. These entities are immersed in socio-environmental conflicts related to gold mining that affect them and their territories.

# Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.geoforum.2020.09.013.

# References

- Arango, M., 1995. Convivencia y poder político entre los andoques (1ra. Ilust). Bogotá: Universidad Nacional de Colombia. Retrieved from http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Convivencia+y+poder+politico+entre+los+andoques#0.
- Ansell, C, Gash, A, 2008. Collaborative governance in theory and practice. Journal of Public Administration Research and Theory 18 (4), 543-571.
- Bäckstrand, K., 2006. Democratizing global environmental governance? Stakeholder democracy after the world summit on sustainable development. Eur. J. Int. Relat. 12 (4), 467–498. https://doi.org/10.1177/1354066106069321.
- Baron, D.P., Lyon, T.P., Lemos, M.C., Agrawal, A., 2012. Environmental Governance. The Oxford Handbook Bus. Nat. Environ. 31 (1), 297–325. https://doi.org/10.1093/ oxfordhb/9780199584451.003.0007.
- Bartel, R., 2014. Vernacular knowledge and environmental law: cause and cure for regulatory failure. Local Environ. 19 (8), 891–914. https://doi.org/10.1080/13549839.

- 2013 798636
- Balée, W., 2013. Cultural Forests of the Amazon: A Historical Ecology of People and their Landscapes. University of Alabama Press, Tuscaloosa.
- Baud, M., de Castro, F., Hogenboom, B., 2011. Environmental governance in Latin America: towards an integrative research agenda. Eur. Rev. Latin American Caribbean Stud. 90, 79–88. https://doi.org/10.18352/erlacs.9749.
- Benavides, C., Duarte, C., 2010. Gobernabilidad política, gobernanza económica y gobiernos indígenas. Análisis Político. Enero/abril 23 (68).
- Blaikie, P., 1999. A review of political ecology issues, epistemology and analytical narratives. Zeitschrift Fur Wirtschaftsgeographie 43 (3–4), 131–147. https://doi.org/10.1515/zfw.1999.0009.
- Blaikie, P., Brown, K., Stocking, M., Tang, L., Dixon, P., Sillitoe, P., 1997. Knowledge in action: local knowledge as a development resource and barriers to its incorporation in natural resource research and development. Agric. Syst. 55 (2), 217–237. https://doi. org/10.1016/S0308-521X(97)00008-5.
- Blaser, M., Escobar, A., 2016. Political Ecology. In: Adamson, J., Gleason, W., Pellow, D. (Eds.), Keywords for Environmental Studies. NYU Press, New York, pp. 164–167. https://doi.org/10.4135/9781608712434.n1189.
- Briassoulis, H., 2019. Governance as multiplicity: the assemblage thinking perspective. Policy Sci. 2019 (52), 419–450. https://doi.org/10.1007/s11077-018-09345-9.
- Brondizio, E.S., Le Tourneau, F.M., 2016. Environmental governance for all. Science 352 (6291), 1272–1273. https://doi.org/10.1126/science.aaf5122.
- Denevan, W., 1992. The pristine myth: the landscape of the Americas in 1492. Ann. Assoc. Am. Geogr. 82 (3), 369–385.
- Descola, P., 2013. Beyond Nature and Culture. University of Chicago Press, Chicago and London.
- Dietz, T., Ostrom, E., Stern, P.C., 2008. The struggle to govern the commons. Urban Ecol.: Int. Perspect. Interact. Humans Nat. 302, 611–622. https://doi.org/10.1007/978-0-387-73412-5 40.
- Duarte, C., 2015. Los macromodelos de la gobernanza indígena colombiana: un análisis socioespacial a los conflictos territoriales del multiculturalismo operativo colombiano. Maguaré 29, 181–234.
- Echeverri, J.A., 2005. Territory as body and territory as nature: Intercultural dialogue?

  The Land Within: Indigenous Territory and the Perception of Environmentand the Perception of Environment, pp. 230–247.
- Echeverri, J.A., 2009. Siete fotografías: una mirada obtusa sobre la Casa Arana. In: Chirif, A., Chaparro, M. (Eds.), Imaginario e Imágenes de la época del caucho: Los sucesos del Putumayo. Lima, pp. 42–57.
- Estrada Añokazi, L.Y., 2017. Soberanía del Conocimiento Tradicional Indígena en la Amazonia Colombiana El Pueblo Andoke de Aduche. Universitat Politecnica de Catalunya.
- Fine, G.A., 2015. Participant Observation. In: Wright, J. (Ed.), International Encyclopedia of the Social & Behavioral Sciences (second edition), pp. 530–534.
- Fletcher, R., Büscher, B., 2017. The PES conceit: revisiting the relationship between payments for environmental services and neoliberal conservation. Ecol. Econ. 132. https://doi.org/10.1016/j.ecolecon.2016.11.002.
- Folke, C., Hahn, T., Olsson, P., Norberg, J., 2005. Adaptive governance of social-ecological systems. Annu. Rev. Environ. Resour. 30 (1), 441–473. https://doi.org/10.1146/annurev.energy.30.050504.144511.
- Franco Garcia, R., 2012. Cariba malo: episodios de resistencia de un pueblo indígena aislado del Amazonas. Mundo Amazónico 3 (2), 154. https://doi.org/10.5113/ma.3. 32781.
- Gibson-Graham, J.K., 2003. Enabling ethical economies: cooperativism and class. Critical Sociol. 29 (2), 123–161. https://doi.org/10.1163/156916303769155788.
- Global Witness, 2020. Defending tomorrow. Downloaded on August 1, 2020 from. https://www.globalwitness.org/en/campaigns/environmental-activists/defending-tomorrow/.
- González, F., 1997. Espacio, Violencia y poder. Una visión desde las investigaciones del Cinep. Controversia, Nr. 189, December 1997. Bogotá Cinep.
- Graeber, D., 2015. Radical alterity is just another way of saying "reality": a reply to Eduardo Viveiros de Castro. Hau: J. Ethnogr. Theory 5 (2), 1–41. https://doi.org/10.14318/hau5.2.003.
- Gros, C., 2000. Políticas de la etnicidad: identidad, Estado y modernidad. Instituto Colombiano de Antropología e Historia, Bogotá.
- Gutierrez, F., Acosta, L.E., Salazar, C.A., 2016. Perfiles Urbanos en la Amazonia Colombiana. Instituto Amazónico de Investigaciones científicas - SINCHI. Retrieved from http://sinchi.gov.co/images/pdf/dfpublicaciones/ PerfilesUrbanoscompletaweb.pdf.
- Guyot, M., 1979. La historía del mar de Danta, el Caqueta. Una fase de la evolución cultural en el Noroeste amazónico. Journal de La Société Des Américanistes 66 (1), 99–123. https://doi.org/10.3406/jsa.1979.2173.
- Haraway, D., 2007. When Species Meet. University of Minnesota Press, Minneapolis. Heckenberger, M.J., Kuikuro, A., Kuikuro, U.T., Russell, J.C., Schmidt, M., Fausto, C., Franchetto, B., 2003. Amazonia 1492: pristine forest or cultural parkland? Science 301, 1710–1714.
- Holbraad, M., Pedersen, M.A., 2014. The Politics of Ontology. Theorizing the Contemporary, Fieldsights, January 13. https://culanth.org/fieldsights/series/thepolitics-of-ontology.
- Howitt, R., Suchet-Pearson, S., 2006. Rethinking the building blocks: Ontological pluralism and the idea of "management". Geografiska Annaler, Series B: Human Geogr. 88 (3), 323–335. https://doi.org/10.1111/j.1468-0459.2006.00225.x.
- Hunt, S., 2014. Ontologies of indigeneity: the politics of embodying a concept. Cultural Geogr. 21 (1), 27–32.
- Instituto Sinchi (2019). Minería. Impactos sociales en la Amazonía. Bogotá. IPBES, 2019. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

- Brondizio, E.S., Settele, J., Díaz, S., Ngo, H.T. (Eds.), IPBES secretariat, Bonn, Germany.
- Latour, B., 1993. We Have Never Been Modern. Harvard University Press.
- Latour, B., 2013. An Inquiry into Modes of Existence: An Anthropology of the Moderns. Harvard University Press, Cambridge (MA).
- Law, J., 2004. After Method: Mess is Social Science Research. Routledge, London and New York
- Law, J., 2015. What's wrong with a one-world world? Distinktion. J. Social Theory 16 (1), 126–139.
- Leach, M., Stirling, A.C., Scoones, I., 2010. Dynamic Sustainabilities: Technology, Environment, Social Justice (Pathways t). Routledge.
- Levis, C., Costa, F., Bongers, F., Peña-Claros, M., Clement, C.R., Junqueira, A.B., Neves, E.G., Tamanaha, E.K., Figueiredo, F.O.G., Salomão, R.P., Castilho, C.V., Magnusson, W.E., Phillips, O.L., Guevara, J.E., Sabatier, D., Molino, J.-F., Cardenas Lopez, D., Monteagudo Mendoza, A., Pitman, N.C.A., et al., 2017. Persistent effects of Pre-Columbian plant domestication on Amazonian forest composition. Science 355, 925–935.
- Londoño Sulkin, C.D., 2017. Moral sources and the reproduction of the Amazonian package. Curr. Anthropol. 58 (4), 477–501.
- Lugo, D.A., 2020. Differentiated impacts of environmental policies on the Colombian Frontier: coercive conservation and containment of illicit activities in the Pacific and the Ariari region. J. Land Use Sci. 15 (2–3), 343–367. https://doi.org/10.1080/ 1747423X.2019.1699612.
- Martins, L., 2007. Illusions of power: vision, technology and the geographical exploration of the Amazon, 1924–1925. J. Latin American Cultural Stud. 16 (3), 285–307. https://doi.org/10.1080/13569320701682518.
- McAfee, K., 1999. Selling nature to save it? Biodiversity and green developmentalism. Environ. Plan. D: Soc. Space 17 (2), 133–154. https://doi.org/10.1068/d170133.
- Meggers, B.J., 1971. Amazonia. Man and culture in a counterfeit paradise. Aldine, Atherton.
- Mol, A., 2002. The Body Multiple: Ontology in Medical Practice. Duke University Press, Durham, North Carolina.
- Morcote-Ríos, G., Raz, L., Giraldo-Cañas, D., Franky, C.E., León-Sicard, T., 2013. Terras Pretas de Índio of the Caquetá-Japurá River (Colombian Amazonia). Tipití: J. Soc. Anthropol. Lowland South America 11(2), 30–39.
- Morcote-Ríos, G., Bernal, R., Raz, L., 2016. Phytoliths as a tool for archaeobotanical, palaeobotanical and palaeoecological studies in Amazonian palms. Bot. J. Linn. Soc. 182 (2), 348–360. https://doi.org/10.1111/boj.12438.
- Newig, J., Fritsch, O., 2009. Environmental governance: participatory, multi-level and effective? Environ. Policy Governance 19 (3), 197–214. https://doi.org/10.1002/eet.
- Olivero-Verbel, J., Carranza-Lopez, L., Caballero-Gallardo, K., Ripoll-Arboleda, A., Muñoz-Sosa, D., 2016. Human exposure and risk assessment associated with mercury pollution in the Caqueta River, Colombian Amazon. Environ. Sci. Pollut. Res. https:// doi.org/10.1007/s11356-016-7255-3.
- Ostrom, E., 2010a. Analyzing collective action. Agric. Econ. 41 (Suppl. 1), 155-166.

- https://doi.org/10.1111/j.1574-0862.2010.00497.x.
- Ostrom, E., 2010b. Beyond markets and states: polycentric governance of complex economic systems. Am. Econ. Rev. 100 (3), 641–672. https://doi.org/10.1257/aer.100.
- Østmo, L., Law, J., 2018. Mis/translation, colonialism and environmental conflict. Environ. Humanities 10 (2), 349–369.
- Palecek, M., Risjord, M., 2012. Relativism and the ontological turn within anthropology. Philos. Social Sci. 43 (1), 3–23.
- Rodríguez, C.A., van der Hammen, M.C., Matapí, U., Yucuna, R., Vargas Tovar, C., 2014.
  European Tropical Forest Research Network News 56: Towards productive land-scapes. Tropenbos International, Wageningen (NL), pp. 197–204.
- Seifart, F., Echeverri, J.A., 2014. Evidence for the identification of carabayo, the language of an uncontacted people of the colombian amazon, as belonging to the tikuna-yur? linguistic family. PLoS ONE 9 (4). https://doi.org/10.1371/journal.pone.0094814.
- Sousa Santos, B., 2004. Democratizar la democracia. Los caminos de la democracia participativa. Fondo de Cultura Económica, Mexico.
- Stengers, I., 2011. Cosmopolitics II. University of Minnesota Press.
- Strathern, M., 2004. Partial Connections. Altamira Press, New York.
- Sundberg, J., 2014. Decolonizing posthumanist geographies. Cultural Geogr. 21 (1), 33-47
- Thaler, G.M., Viana, C., Toni, F., 2019. From frontier governance to governance frontier: the political geography of Brazil's Amazon transition. World Dev. 114, 59–72. https://doi.org/10.1016/j.worlddev.2018.09.022.
- Todd, Z., 2014. An indigenous feminist's take on the ontological turn: 'ontology 'is just another word for colonialism. J. Historical Sociol. 29 (1). https://doi.org/10.1111/ johs.12124.
- Uribe, T., 2013. Caucho, explotación y guerra: configuración de las fronteras nacionales y expoliación indígena en Amazonía. Memoria y Sociedad 17(34), 34–48. https://doi. org/http://hdl.handle.net/10554/27246.
- van Der Hammen, M.C., 1992. El manejo del mundo. Naturalez y sociedad entre los Yukuna de la amazonia colombiana, Segunda ed. Tropenbos Colombia, Bogotá.
- van Hecken, G., Bastiaensen, J., Windey, C., 2015. Towards a power-sensitive and socially-informed analysis of payments for ecosystem services (PES): addressing the gaps in the current debate. Ecol. Econ. 120, 117–125. https://doi.org/10.1016/j. ecolecon.2015.10.012.
- van Wezemael, J., 2008. The contribution of assemblage theory and minor politics for democratic network governance. Planning Theory 7 (2), 165–185.
- Vigh, H.E., Sausdal, D.B., 2014. From essence back to existence: Anthropology beyond the ontological turn. Anthropol. Theory 14 (1), 49–73.
- Viveiros de Castro, E., 1998. Cosmological deixis and amerindian perspectivism. J. R. Anthropol. Inst. 4 (3), 469. https://doi.org/10.2307/3034157.
- Watling, J., Mayle, F.E., Schaan, D., 2018. Historical ecology, human niche construction and landscape in pre-Columbian Amazonia: a case study of the geoglyph builders of Acre, Brazil. J. Anthropol. Archaeol. 50, 128–139. https://doi.org/10.1016/j.jaa. 2018.05.001.