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Towards a transformative governance of the Amazon

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Abstract

The crises of the Anthropocene can neither be confronted incrementally nor through short-term, reductionist strategies. As the risk of severe, irreversible socioecological damage increases, transformative change towards achieving long-term sustainability becomes ever-pressing. Against this backdrop, we explore how transformative governance can help strengthen ecosystem resilience, empower vulnerable communities and ensure sustainable development in the Amazon. The article starts by briefly reviewing the concept of transformative governance, arguing that it provides an adequate framework for thinking about and responding to the challenges of the Anthropocene. It then looks at how extant governance practices are destroying and fragmenting the Amazon, eroding the resilience of regional ecosystems. It proceeds by investigating how the Andes–Amazon–Atlantic Corridor, a transnational project aligned with the normative commitments and operational principles of transformative governance, aimed at protecting, restoring and building socioecological connectivity in the region, can offer an alternative pathway for Amazonian development in the new geological epoch.

1 | RETHINKING GOVERNANCE IN THE ANTHROPOCENE TO SPUR TRANSFORMATIVE CHANGE

In the Anthropocene, the triple challenge of mitigating climate change, halting species extinction and promoting the well-being of a growing world population can neither be dealt with incrementally nor through short-term, reductionist strategies. As the risk of severe, irreversible socioecological damage increases, the long-term transformative change of economies and societies becomes ever-pressing (Díaz et al., 2019; Pörtner et al., 2021). Transformative change is understood as a system-wide reconfiguration of the economic, social and technological structures, norms and rules, paradigms, goals and values driving ecological problems (IPBES, 2019). In achieving such change, transformative governance[1] is key (Chaffin et al., 2016; Pascual et al., 2022; Visseren-Hamakers et al., 2021). Using the Amazon as a case study, this article will investigate the operational framework, sociopolitical importance and practical openings of transformative governance in redressing structural inequalities, curbing environmental destruction and fostering sustainability transformations.

The aim of transformative governance is to enhance ecosystem resilience and adaptability while simultaneously advancing sustainable development. A transformative model of governance capable of providing adequate responses to the challenges of the Anthropocene is integrative, inclusive, pluralist and adaptive (Visseren-Hamakers et al., 2021).[2] The entangled crises of the new geological epoch defy the current fragmented policy landscape (Bornemann, 2021). A transformative, *integrative* approach to governance is driven by a concern with both promoting change towards sustainability across issues, sectors and scales, and ensuring that local solutions have impacts elsewhere (i.e., across places). It requires not only coordinating strategies and levels of governance, thereby enhancing policy coherence, but also combining governance instruments with a focus on addressing

indirect drivers (or root causes) of ecosystem change (Visseren-Hamakers et al., 2021).

The world of the Anthropocene is composed of multiple socionatures; in other words, natures that are socially interpreted and constantly (re)made (Castree & Braun, 2001; Wapner, 2014). It is a world wherein the human-driven devastation of the biosphere has become an existential threat, exposing our shared ties of vulnerability with animals, plants and other living organisms (Braidotti, 2013). In this context, confronting the problems of the new geological epoch demands, first, considering the social concerns and inequalities, and the diverse, often conflicting understandings of nature, that shape human interactions with the planet; and second, recognising humanity's enmeshment in and dependence on ecological systems (Pereira & Gebara, 2022). The Anthropocene therefore poses a fundamental challenge to exclusionary 'command-and-control' governance approaches based on the assumption of a stable and objective environment, and anthropocentric framings that conceive the human species as separate from and superior to all other earthly beings (Inoue et al., 2020; Pereira, 2021). A transformative, *inclusive* model of governance allows for a wide range of actors from diverse sociocultural and economic backgrounds, upholding different interests and values, to collectively participate in decision-making, empowering marginalised populations and emancipating those who represent transformative sustainability principles, paradigms and ambitions (e.g. indigenous peoples and other local communities). Moreover, it moves beyond anthropocentrism by acknowledging rights to nature and animals, and promoting the inclusion of non-humans in governing processes (Visseren-Hamakers et al., 2021).

The Anthropocene is a complex and unstable epoch (Steffen et al., 2018); comprehending and navigating it requires not only listening to nature and being receptive to its signs (Dryzek & Pickering, 2019), but also integrating different sciences and types of knowledge (IPBES, 2019) as well as providing innovative and iterative responses (Pereira, 2021). A *pluralist* model of governance enhances capacity for transformative governance by building upon collaborative networks of knowledge co-production that include multiple stakeholders and recognise indigenous and local knowledge systems as valid and important (Visseren-Hamakers et al., 2021). In turn, an *adaptive* approach to governance allows for continuous learning and policy adjustments by stimulating dialogue and reflexion, flexibility and experimentation (Visseren-Hamakers et al., 2021).

Advancing transformative governance demands understanding the structural, intersubjective and individual obstacles and opportunities for transformative change. While the main barriers to system-wide transformations include persistent power relations, vested interests, dominant ideologies and cognitive constraints, the opportunities encompass factors such as existing progressive norms and institutions, previous positive governance experiences and the potential of human agency and creativity (Chaffin et al., 2016). Once those conditions are clarified, transformative change can be promoted through combining structural, systemic and enabling pathways: the first consists of seizing key moments of crisis to foster a radical reconfiguration of the ideological underpinnings of social, political and economic relations; the second implies intervening in socioecological systems towards strengthening ecosystem adaptability and resistance through, for example, promoting normative change and technical innovation, and encouraging epistemic and cultural diversity in managing the system; the third pathway refers to nurturing human agency by widening the set of capacities that enable groups and individuals to organise and contest existing structures while advancing alternative possibilities for the future, thus becoming agents for transformative change (Scoones et al., 2020).

Policy Implications

- There is mounting scientific evidence that the Amazon has been losing resilience and may be approaching a tipping point, whereby the rainforest will evolve to savannah. A transformative approach to the governance of the region is needed to avoid Amazon dieback.
- Protecting, restoring and building connectivity between Amazonian ecosystems and regional populations is a key solution for climate change mitigation and adaptation, biodiversity protection and human development. Countries in the region should work together to design and implement socioecological connectivity strategies.
- Consistent social science research on the topic and increased support for regional and local initiatives aimed at creating ecological corridors are critical conditions for promoting the integration of the concepts of socioecological fragmentation and connectivity into plans, policies and governance practices on different levels.
- The election of a pro-environment president in Colombia and the defeat of Jair Bolsonaro in Brazil in 2022 open a window of opportunity for transformative change across the region.

Inspired by this framework, we explore how transformative governance can help strengthen ecosystem resilience, empower vulnerable communities and advance long-term sustainable development in the Amazon. The region is home to the planet's largest contiguous tropical forest and river system, which stores approximately half of all tropical forest carbon while harbouring 10 per cent of the Earth's known species. Amazonian ecosystems provide livelihoods for the region's indigenous, riverside and urban populations, sustain traditional local cultures and are critical components of the life-support system that makes the world habitable, playing a role in natural processes such as water cycle and climate regulation (Science Panel for the Amazon, 2021). However, there is mounting scientific evidence that the Amazon has been losing resilience and may be approaching a tipping point, whereby the rainforest will evolve to savannah in large parts of the region (Boulton et al., 2022; Gatti et al., 2021; Lovejoy & Nobre, 2019; Staal et al., 2020). This could have irreversible implications not only on local populations and regional ecological processes, but also on the stability of the Earth system as a whole. A transformative approach to the governance of the region is needed to avoid Amazon dieback.

The argument starts by demonstrating how extant governance practices are destroying and fragmenting the forest, eroding the resilience of Amazonian ecosystems; erasing indigenous ways of knowing and being; marginalising vulnerable groups; and threatening the well-being of more-than-human populations on regional and planetary scales. We first look at the structural drivers of the Amazon's destruction and fragmentation, situating them within a broader political, economic and social context; then, we show how regional dynamics of socioecological exploitation have been further intensified by recent developments. The following sections investigate how the Andes–Amazon–Atlantic (AAA) Corridor, a transnational project aligned with the normative commitments and operational principles of transformative governance, aimed at protecting, restoring and building socioecological connectivity in the region, can offer an alternative pathway for Amazonian development. After presenting the project (origins, goals, vision and current status and activities), we clarify its transformative potential, identify the main obstacles it has faced and reflect on both possibilities for implementation and the problems it could raise, illuminating policy implications. Through this in-depth case study, the article contributes to emerging debates about Anthropocene governance (Biermann, 2014; Chandler, 2018; Dryzek & Pickering, 2019; Pattberg & Zelli, 2016); the possibilities of social transformation towards sustainability (Avelino et al., 2016; Grin et al., 2010; Pascual et al., 2022; Reyers et al., 2018; Scoones et al., 2020; Visseren-Hamakers et al., 2021); and the Amazon as an incubator for transformative innovation for sustainable governance (Brondizio et al., 2021; Futemma et al., 2020; Milhorance & Bursztyn, 2018).

The analysis presented in Section 2 builds on the first author's previous extensive research on the governance of the Amazon. The case study examined and discussed in Sections 3 and 4 draws upon short interviews with, and documents provided by, members of the team working on the AAA Connectivity Initiative, information, publications and videos found at the website of the organisation promoting the implementation of the project (the North Amazon Alliance – ANA) as well as online news and published interviews about the topic.

2 | OPPRESSING HUMANS, ECOLOGIES AND NON-HUMAN SPECIES: THE FRAGMENTED, EXCLUSIONARY AND ANTHROPOCENTRIC GOVERNANCE OF THE AMAZON[3]

The Amazon is a complex and eclectic region, wherein nature, resource extraction, culture and spirituality are enmeshed, and wherein a wide range of actors, activities and projects – often upholding competing aims and interests – coexist (Pereira & Gebara, 2022). A place of diverse landscapes, or multiple socionatures, embodying an increasingly complex mosaic of protected areas, indigenous lands and sustainable extractive reserves,[4] as well as expanding infrastructure, extractive industries and growing informality and organised crime (Science Panel for the Amazon, 2021).

Since the middle of the 20th century, agricultural and livestock activities, the construction of roads and dams, oil, gas and mining concessions and the proliferation of informal or illegal activities such as logging, mining and illicit crop cultivation have become major drivers of deforestation and fragmentation in the region (Fischer et al., 2021; Montibeller et al., 2020; RAISG, 2020; Science Panel for the Amazon, 2021; Silva Junior et al., 2020). An often-neglected issue, fragmentation consists of the division of large, continuous forest tracts into smaller, more isolated pieces or patches (UNEP, 2019), thereby creating a human barrier to the free movement of animals and other vital ecological flows (such as seed dispersal, gene flow and colonisation of suitable sites). This threatens the functionality of ecosystems, including their capacity to adapt to natural and anthropogenic disturbances such as climate change, while mammals and other species become increasingly limited in their ability to migrate, disperse, mate, feed and thrive, thus facing greater threat of extinction (UNEP, 2019). If ambitious policies to protect the region are not implemented, large parts of the Amazon could be severely fragmented by around 2050 (Gomes et al., 2019).

The fragmentation of ecosystems is an obstacle to local sustainable development. In the Amazon region of the Maranhão state in Brazil, for example, the size of forest areas outside conservation units no longer secures sustainable forest management practices (Silva Junior et al., 2020). This poses a major threat to the biodiversity-based food systems of indigenous peoples (FAO and Alliance of Biodiversity International and CIAT, 2021).

Below, we turn to the paradigms, goals and values that have informed the governance practices that are destroying and fragmenting the region, pushing the Amazon to the brink of collapse.

2.1 | The root causes of the Amazon's destruction and fragmentation

Amazonian policies emerged in the context of the Cold War and mostly under authoritarian regimes. They aimed at deep structural change and occupation and national integration of the region along capitalist lines; a strategy to develop the economy, address overpopulation and poverty in more settled and contested areas, ensure regional food supply and energy security or affirm state sovereignty over the forest. During that period, infrastructure investment, colonisation programmes and incentives for resource extraction and energy projects began to target the region, often disregarding the rights of indigenous peoples and other local communities, whose ways of knowing and being were associated with underdevelopment and backwardness. Modernisation and progress were understood as technologically driven, ever-expanding economic growth, to be achieved through land occupation and natural resource exploitation; nature was perceived as an inert entity with no intrinsic value (Science Panel for the Amazon, 2021; see also Charbonnier, 2021; Pereira & Gebara, 2022).

This modernisation paradigm intensified in the late 1980s with democratic transitions and the neoliberal demands of the Washington Consensus, and was fuelled by growing international commodity demand over the following decades. The focus of national governments shifted from state integration of the Amazon to the incorporation of the region into large-scale export corridors. Simultaneously, Amazonian policy was influenced by the emergence of Latin American socio-environmentalism[5] and the institutionalisation of sustainable development in global politics. As a result, and in parallel with extractive activities aimed at accelerating economic growth, protected areas expanded, indigenous historical land rights were recognised in national constitutions and green projects implemented in the Amazon (Science Panel for the Amazon, 2021).

Despite that, the idea of the forest as a source of commodities, a solution to national trade imbalances and the go-to answer for addressing structural problems such as electricity shortages has prevailed (Pereira & Gebara, 2022). Inevitably, more-than-human logics of domination authorised by predatory, anthropocentric approaches to development have threatened the integrity of Amazonian ecosystems and the livelihoods and well-being of vulnerable groups. The insights and interests of local populations and nature's rights have remained at the margins of public policy. In fact, the regional development policies adopted to govern the Amazon have almost exclusively benefited the richest areas in the countries that share its forests and rivers, and powerful economic actors whose privilege has allowed them to influence political agendas further in their favour; consequently, existing policies have not only (re)produced poverty, injustice and inequality across the Amazon (problems that have further boosted the forest's destruction), but have also eroded alternative modes of development (Science Panel for the Amazon, 2021).

The development paradigm of modernisation (Norgaard, 1994) contributed to intensifying and cementing an instrumentalist, exploitative, utilitarian relationship with nature, through which countries in the region have built themselves. This has shaped the mindsets of elites and ruling classes, and produced path dependencies (Pereira & Viola, 2022a; see also Dryzek & Pickering, 2019). Moreover, by obscuring more-than-human interdependencies, and thereby dichotomising social and ecological concerns, that same paradigm promoted fragmented policy approaches to development and environmental protection which, in turn, have given rise to multiple and persistent social conflicts across the Amazon. In the absence of inclusive forms of governance that considered the region's heterogeneity, this complex and contested environment has hindered possibilities of building long-term alliances that could bridge tensions between developmentalism and environmentalism, and promote more sustainable uses of the forest (Pereira & Gebara, 2022). At the same time, the most vulnerable populations, smallholder family famers in particular, have barely had access to policies for sustainable land use – lacking financial and technical assistance, they have relied predominantly on environmentally harmful and unproductive farming practices which, by generating insufficient income, have forced them to clear more forests (Stabile et al., 2020). In most Amazonian countries, successive governments have marginalised traditional farming systems, widely understood as primitive, inefficient and unproductive, and therefore incompatible with modernisation and development, despite the fact that they can be a key part of a sustainable land use agenda (Ravikumar et al., 2016). In addition, weak rule of law in a region that, notwithstanding its centrality in the Earth system, is seen by governing elites as a remote and peripheral area has long encouraged invasions of indigenous lands, the proliferation of transnational networks of wildlife trafficking,

illegal forest clearing and informal practices of resource extraction by both formal companies and clandestine groups, often through the exploitation of rural populations (Charity & Machado Ferreira, 2020; Pereira & Viola, 2022b; Science Panel for the Amazon, 2021).

While many of the problems facing the Amazon could be ameliorated through the regional integration of its territories, this has proven a hard struggle. Ambitious transnational cooperation schemes, which would allow sharing of scarce resources among governments struggling with financial constraints to control illegal activities, the implementation of joint projects to sustainably explore shared ecosystems and the promotion of ecological and sociocultural connectivity (following), have been repeatedly blocked by sovereignty and territorial integrity concerns. These have persisted, particularly within the Brazilian military sector, since the 1970s, when the possibility of internationalising the Amazon as a potential mechanism to protect it was first raised (Tigre, 2017).

Finally, a narrow approach to environmental governance has further limited the capacity of countries in the region to safeguard the resilience of ecosystems. Specifically, environmental policies targeting the Amazon have mainly focused on reducing deforestation. Yet deforestation control policies do not directly address other pressing ecological problems, such as forest degradation (caused by fires, selective logging and edge effects), which has become the main cause of socioenvironmental impoverishment in the territory and a significant source of CO_2 emissions (Silva Junior et al., 2021). Likewise, the command-and-control regulatory approach to land use change that prevails in most of the region not only failed to mitigate conflicts between development and conservation[6]; it has also proven insufficient to promote the ecological restoration needed to connect fragmented forest landscapes and ensure the healthy functioning of ecosystems (Bustamante et al., 2019).

In examining the limitations and failures of extant modes of governance, this subsection has shown how the paradigms, goals and values of modernisation became the main drivers of socioecological destruction and fragmentation in the Amazon. Amazonian policies have been largely informed by modernist, anthropocentric ideas about progress and autonomy; as a result, they have been guided predominantly by a concern with economic growth and territorial integrity, rather than long-term sustainability. This has benefited a few groups, whose predatory interests have, in many cases, become a major force in national and regional politics, which has in turn hampered the emergence of alternative pathways for Amazonian governance. Simultaneously, the failure to recognise the complexity of socionatures (and the very existence of socionatures in the first place) has resulted in the systematic adoption of narrow, fragmented and top-down policy approaches to the region.

Naturally, and despite their failings in dealing with ecological degradation and regional poverty and inequality, the institutions governing the region have not changed in response to their failures; on the contrary, strong continuity remains inherent to the culture of Amazonian policy (Dryzek & Pickering, 2019).

2.2 | Ignoring the signs of savannisation: A brief overview of recent developments in Amazonian politics and policies

Areas of the Amazon are already shifting from rainforest to savanna ecosystems. Nevertheless, governments continue to ignore the voices of scientists and the worrying signs of a changing forest landscape (Chiaretti, 2021; Milz, 2021). In recent years, predatory development practices have even expanded in most of the region, and are now threatening the western portion of the forest, which is still almost entirely intact (Matricardi et al., 2020). Meanwhile, sovereignty anxieties have re-emerged and intensified.

In Bolivia, governmental promotion of agroindustry in the Amazon and hydrocarbon exploration and extraction inside protected areas are major threats to the forest and its populations. Those policies were initiated by the administration of former President Evo Morales (2006–2019) with the aim of increasing state revenues and financing social welfare programmes, and have largely benefited both the economic elites of the Amazonian department of Santa Cruz and privileged peasants supportive of the government, to the detriment of indigenous peoples' rights (Pereira & Viola, 2022b). The current administration, led by President Luis Arce (2020–), has not revoked decrees favouring agroindustry despite the requests from indigenous communities, civil society organisations and scientists, and is further opening protected areas to resource extraction and encouraging mining, an activity that serves the interests of some co-operative sectors with links to the government (Paredes Tamayo, 2021, 2022).

In Colombia, occupation by criminal gangs, cattle ranchers, land mafias, investors and new settlers of the forest areas in the Amazon previously ruled by the Revolutionary Armed Forces of Colombia (FARC) following the 2016 peace deal, as well as the Iván Duque (2018–2022) administration's condemnation and repression of social mobilisations and support for the regional elites' plan to transform the country into an agricultural powerhouse, caused severe damage to ecologies and local communities (Pereira & Viola, 2022b). The government instrumentalised the dramatic increase in deforestation rates registered since 2016 to expand the government's control over the region's economy of natural resource extraction (Gudynas, 2019). In this context, military operations

took place in the Amazon; these have targeted and criminalised small farmers who are in the most vulnerable position within the deforestation chain, while leaving untouched the powerful actors and interests that lie behind the destruction of the forest, contributing to the forced displacement of peasant and indigenous communities to the benefit of companies (Dil et al., 2021).

Similarly, the deep political instability in Peru has weakened public institutions and favoured the spread of illegal activities in the Amazon, while strengthening political parties (e.g. *Fuerza Popular*) with close ties to mining and logging interests (Pereira & Viola, 2022b). A more fragmented and particularistic Peruvian Congress, elected in 2021, is aiming to weaken environmental norms and boost predatory investments (SPDA Actualidad Ambiental, 2021), while blocking governmental initiatives and launching attempts to impeach President Pedro Castillo. The head of state and his administration are thus currently highly vulnerable to the predatory interests of congressmen (Gómez Hernández, 2022; Zacarías, 2021).

Yet the explicit anti-environmentalist agenda and anti-indigenous discourse of the Jair Bolsonaro (2019–2022) administration in Brazil has arguably been the most dangerous threat to the Amazon in the whole region. Since it has taken office, and supported by the powerful anti-conservationist members of the Agribusiness Parliamentary Front in Congress, Bolsonaro's government has not only repeatedly denied the fundamental role of the Amazon in the stabilisation of the Earth system, but also dismantled the country's environmental policies and laws; weakened environmental supervisory institutions; lobbied for the approval of a bill that would allow commercial mining on indigenous lands; militarised the forest while bypassing democratic dialogue with indigenous groups and civil society, academics and environment-related experts; among others. The mounting international pressure to protect the Amazon triggered by the 2019 fire crisis re-awakened sovereignty and territorial integrity concerns over the region, and facilitated the transfer of responsibility over environmental management and protection to the military, a sector that has been historically in favour of predatory development projects across the forest. Ultimately, the increased presence of the armed forces in the Amazon provided coverage for the destruction of ecosystems and the erasure of local modes of living (Ferrante & Fearnside, 2020).

Since 2020, governments in the region have instrumentalised the COVID-19 pandemic to further dismantle socioenvironmental protection mechanisms in the name of economic recovery (Dil et al., 2021; Vale et al., 2021). Moreover, confinements and diminished forest monitoring and state presence during the worst moments of the health crisis encouraged new illegal incursions in the Amazon (Science Panel for the Amazon, 2021).

In light of all the above, it is unsurprising that over half the population in Brazil's Amazonas State live below the poverty line (IBGE, 2019); the invasion of indigenous lands and the killing of indigenous leaders as well as other environmental and human rights defenders are on the rise (Human Rights Watch, 2021); half the tree species in the Amazon are at risk of extinction (ter Steege et al., 2015); and an alarming decline in the forest's vertebrate populations has been registered over the past decades (WWF, 2020).

Having explained how existing forms of governance have systematically contributed to the destruction and fragmentation of the Amazon – thus endangering the more-than-human relations that make up the region – we next explore the underlying principles and practical possibilities of a project that seeks to curb these dynamics by placing connectivity, reflexivity and interspecific relations at the heart of Amazon-oriented collective action and policy-making. By doing so, this emerging project advances a potentially integrative, inclusive, pluralist and adaptive path towards the transformative change of Amazonian governance.

3 | THE ANDES–AMAZON–ATLANTIC ECOLOGICAL AND SOCIOCULTURAL CORRIDOR: A TRANSFORMATIVE GOVERNANCE STRATEGY FOR THE AMAZON

The Amazon is under threat – predatory human activities are destroying and fragmenting the region's ecosystems. Maintaining or re-establishing ecological connectivity between fragmented habitats or landscape/seascape patches and mainstreaming connectivity into economic and development policies have been identified as key to preserving the Earth's species and ecological functions as well as achieving the UN Sustainable Development Goals (IPBES, 2019). Protecting existing and creating new, large connected nature reserves (Laurence et al., 2011), and restoring small, isolated habitat patches (Wintle et al., 2019), are critical for preserving the Amazon and securing its biodiversity and the livelihoods of indigenous and other local communities.

Ecological connectivity is defined as 'the unimpeded movement of species and the flow of natural processes that sustain life on Earth' (CMS, 2019). In many cases, connectivity-oriented strategies can incorporate local socioeconomic concerns (Kremen & Merenlender, 2018; UNEP, 2019). When managed sustainably, as in the case of indigenous territories, surrounding lands can be a buffer that protects areas from threats while connecting them to one another. In addition, by maintaining biodiversity and the well-functioning of ecosystems,

surrounding lands ensure the production of goods such as food, fibre and fuel over time and are more resilient to extreme weather events and the outbreak of pests and disease. For the sustainable production of goods, a variety of biodiversity-based land techniques can be employed, such as agroforestry and ecosystem-based forest management. This offers an important opportunity for reducing rural poverty while simultaneously protecting plants, animals and ecosystems in the Amazon. Because biodiversity-based land management systems are knowledge intensive, they can greatly benefit from traditional ways of knowing, thus empowering local communities (Kremen & Merenlender, 2018; Silva Junior et al., 2020). Moreover, by promoting the allocation of public forests to sustainable community use, connectivity policies guided by both ecological and social considerations can contribute to clarify tenure rights, thereby limiting the amount of land available for the expansion of agriculture and ranching (Stabile et al., 2020). Accordingly, connectivity-oriented strategies provide solutions with potential sustainable impacts across issues and sectors.

Most countries still lack a consistent approach to ecological connectivity, which (given that ecosystems often transverse national borders) requires the strengthening of international cooperation (UNEP, 2019). In South America, initiatives to promote a more systematic engagement with the challenge of ecological fragmentation have been developed, although mainly on a national scale, with only a few transnational projects having emerged[7] (Ministério do Meio Ambiente, 2016). The most ambitious project – the AAA Corridor – is distinguished by its magnitude and strong indigenous-inspired conception. Bringing together different rights, stake and knowledge holders, including civil society groups, indigenous and other local communities, governments, academics and entrepreneurs, it seeks to create the world's largest ecological corridor, which would contribute to maintaining the connection between the ecoregions of the Andes mountains, the Amazon rainforest and the Atlantic Ocean – the planet's most intact portion of tropical rainforest. This project shifts dominant narratives about the protection of the Amazon from a matter of national sovereignty to an issue of shared responsibility. More importantly, it puts forward an alternative governance model based upon the recognition of the fragile intertwinement of the well-being of people, non-human living beings and the resilience of ecosystems; a model that is strongly aligned with the basic principles and underlying aims of transformative governance.

The idea of creating the AAA Corridor is credited to anthropologist Martín von Hildebrand,[8] founder of the Colombian NGO Gaia Amazonas and coordinator of the project. It builds and expands on the vision of the 'Consolidation of the Amazon Region' (COAMA) programme, launched in the late 1980s by Gaia Amazonas, other Colombian NGOs and some of their counterparts in Europe, with the aim of empowering Amazonian indigenous communities and protecting the region in Colombia (von Hildebrand & Brackelaire, 2012). In 1999, von Hildebrand and COAMA won the Swedish Right Livelihood Award (known as the 'Alternative Nobel') for implementing a truly alternative, inclusive and intercultural approach to forest conservation. At the root of the COAMA programme was the assumption that intercultural approaches 'are not simply combining different elements, but are ways of respecting differences and searching together for appropriate paths' (Right Livelihood, 1999). By establishing an alliance of mutual respect and reciprocity with indigenous communities, thereby enabling them to make informed, collective choices and determine their own development path, COAMA 'transform[ed] the historical relationship of exploitation into a creative joint search for sustainable options' (Right Livelihood, 1999). In the framework of the programme, micro-projects in health, education, cultural and ecological recovery, and the sustainable production of market goods developed; through them, indigenous communities began to reclaim control of their livelihood systems (Right Livelihood, 1999).

The AAA Corridor initiative seeks to maintain, restore and design both ecosystem and sociocultural connectivity in the northern region of the Amazon River, and promote sustainable, inclusive and interspecific modes of development (ANA, 2021, 2022). The aim is for the corridor to encompass the Colombian Amazon region; the states of Amazonas and Bolívar in Venezuela; the states of Amazonas, Roraima, Amapá and Pará in Brazil; the Ecuadorian Amazon region; the northern region of the Marañón River in Peru; and the Amazon regions of Guyana, Suriname and French Guyana. Overall, the projected corridor covers approximately 2.7 million km^2, accounting for around one-third of the Amazon (Figure 1). Although it might at first seem to be a particularly difficult project to implement given its magnitude, nearly two-thirds of the corridor are already under a formal protection figure, including 222 protected areas and 2003 indigenous territories. The initiative will also integrate areas that are not under formal protection categories and approximately 440 rural and urban centres that are considered critical for ecological and sociocultural connectivity (Gaia Amazonas, 2020a).

Also known as 'The Path of the Anacondas',[9] the AAA Corridor is founded upon an indigenous worldview. Origin stories of some Amazonian indigenous peoples say that humanity was born in the mouth of the Amazon River, in the Atlantic Ocean. According to this myth, ancestral ethnic groups in the form of anacondas travelled along the Amazon River and its tributaries to the Andes, distributing life and giving each human group both its territory and a series of management principles, which would be essential to preserving ecological balance and the flow of vital energy in the region.

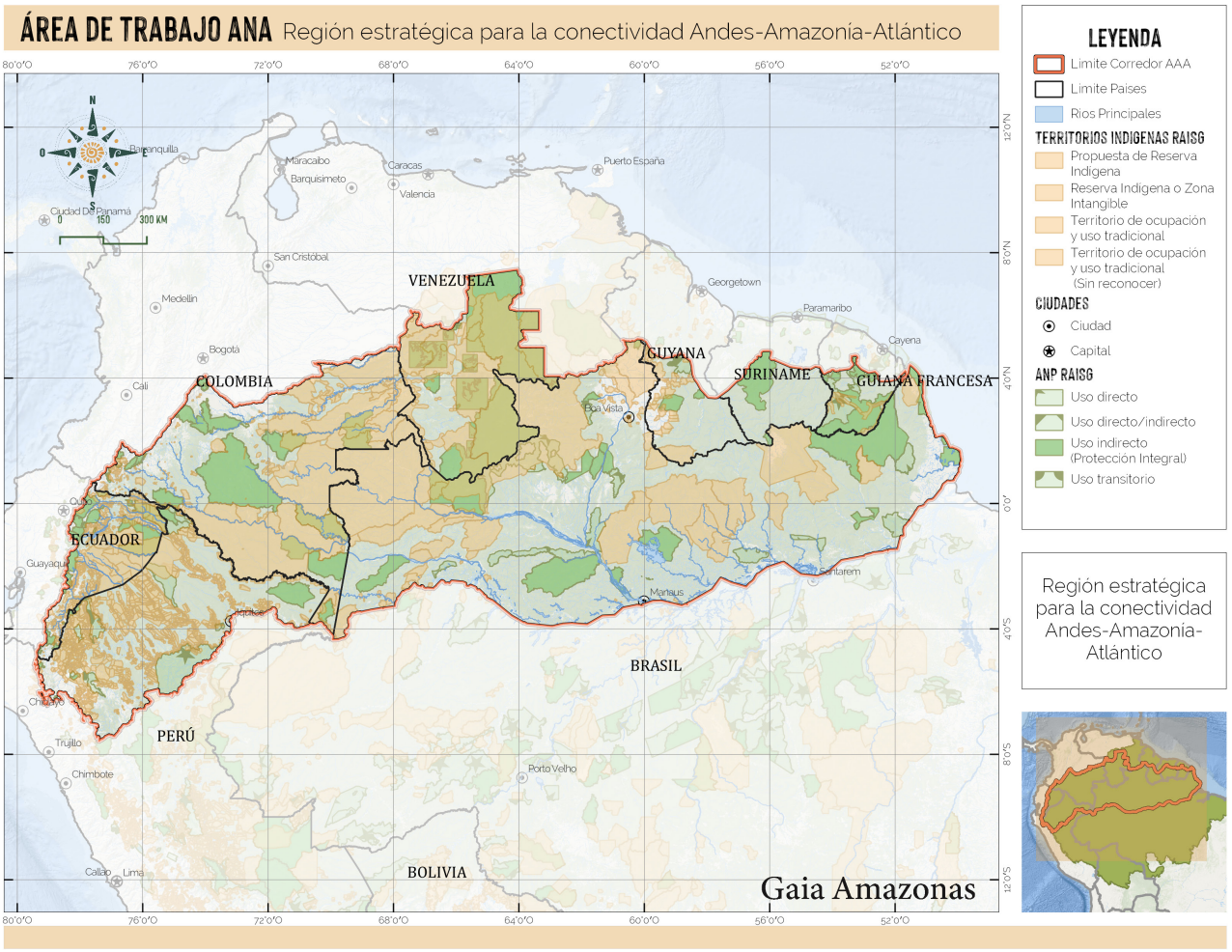

FIGURE 1 Map of the AAA corridor. *Note*: Translation of the map's caption (authors' translation from Spanish): ANA's Working Area – Strategic Region for the Andes-Amazon-Atlantic connectivity [Área de trabajo ANA – Región estratégia para la conectividad Andes-Amazonía-Atlántico]; Caption [Leyenda]; AAA Corridor Boundaries [Limite Corridor AAA]; Countries Boundaries [Limite Paises]; Main Rivers [Rios Pincipales]; RAISG Indigenous Territories [Territorios Indigenas RAISG]; Indigenous Reservation Proposal [Propuesta de Reserva Indígena]; Indigenous Reservation or Intangible Zone [Reserva Indígena o Zona Intangible]; Occupied territory wherein the land is traditionally used [Territorio de Ocupación y Uso Tradicional]; Occupied territory wherein the land is traditionally used (unrecognised) [Territorio de Ocupación y Uso Tradicional (Sin Reconocer)]; Cities [Ciudades]; City [Ciudad]; Capital [Capital]; RAISG Protected Natural Areas [ANP RAISG]; Direct Use [Uso Directo]; Direct/Indirect Use [Uso Directo/Indirecto]; Indirect Use (Full Protection) [Uso Indirecto (Protección Integral)]; Transient Use [Uso Transitorio]. *Source*: Provided to the authors by Gaia Amazonas.

Along this path, are the points that constitute the indigenous system of sacred sites and networks of critical places for conservation and integrated management. This indigenous myth provides one of the cultural foundations for the AAA Corridor as a project of regional and interspecific governance (Gaia Amazonas, 2020b). More critically, by recognising the fragile entanglement between human and non-human nature, and bringing together multiple actors and forms of knowledge, the corridor also epitomises an alternative pathway for the transformation of Amazonian governance and decision-making; a path wherein progress and emancipation are envisioned as the safeguard of more-than-human connections and the promotion of interspecific care and planetary sustainability.

The sustainable impacts of this initiative would be felt not only across issues, but also across places. The connectivity between the Andes, the Amazon and the Atlantic is critical for safeguarding South America's water cycle and the regulation of the planet's climate. The fact that connectivity between the Andes and the Amazon has been rapidly eroding in recent years (Clerici et al., 2019) reinforces the importance of the AAA Corridor project. In addition to safeguarding biological diversity by facilitating species transit, seed dispersion and genetic flow (thus enhancing the resilience of ecosystems and their capacity to adapt to climate change), consolidating connectivity would ensure the protection of the region's water flow. The massive air flows of water vapour that come from tropical areas of the Atlantic Ocean are fed by the moisture that evaporates from Amazonian trees and helped by the winds, these travel to the Andes, where they acquire greater speed. These 'flying rivers' cause rain over 3000 km

away, influencing rainfall patterns in distant regions such as southern Brazil, Uruguay and Argentina. This flow is affected and can be disrupted by deforestation (Gaia Amazonas, 2020b; Makarieva & Gorshkov, 2010). The AAA Corridor project recognises that 'interconnected lands, freshwater and seas are the lifeblood of intact nature' (UNEP, 2019, p. 27). In addition, consolidating connectivity would guarantee that healthy Amazonian trees would continue to both absorb and store carbon dioxide, and create white clouds with high albedo by pulling in water from the soil and releasing water vapour, thus helping to keep temperatures down and regulate the climate. Finally, by preserving, restoring and creating sociocultural connectivity, the corridor would promote the integrated co-management of the region. Alongside ecological connectivity, the initiative seeks to cultivate the connectivity of human relations, linking rural and urban communities, governmental, non-governmental and academic institutions on local, regional, national and international levels, and the private sector (Gaia Amazonas, 2020a).

The project, conceptualised through the collaboration of different actors, recognises that any successful response to the challenges of the Anthropocene can only be achieved through reciprocal dialogue between different knowledge systems and actors. The interests of (and signals from) nature must be included within it. Simultaneously, it is accepted that it would not be possible to transform into protected areas lands where resource extraction is already taking place. Instead, it is proposed that production in those lands is approached from a sustainable point of view. Essentially, the corridor is envisioned as a horizontal and inclusive laboratory aspiring to develop pragmatic responses to urgent socioecological problems through the combination of indigenous, traditional and Western forms of knowledge; a place wherein learning, experimentation and reflexivity promote adaptive solutions to the challenges of the Anthropocene, and wherein the marginalised voices of those whose values provide critical insights into how to respond to the crises facing the region are not only heard but also incorporated into decisions. The project does not seek to impose a blue-print for the Amazon, but to open an inclusive permanent forum in which policies and practices to safeguard the region are collaboratively designed and implemented (Gaia Amazonas, 2020a). This would offer possibilities for both overcoming the ever-present conflicts between developmentalism and environmentalism (and intertwining the different worlds that coexist in the Amazon; Pereira & Gebara, 2022), and building the capacity to critically question the core values and practices guiding regional policies through time, to overcome path dependencies and (re)transform governance procedures in light of the socioecological outcomes of past choices (Dryzek & Pickering, 2019).

Those involved in the AAA Corridor initiative are working to raise awareness about the importance of rethinking governance strategies in terms of ecosystem and sociocultural connectivity with the aim of promoting the inclusion of the concept of connectivity into strategies, plans and policies on different levels (Alianza Noramazónica, n.d.). In its early stages, the project was able to leverage some governmental support. In 2015, former Colombian President Juan Manuel Santos supported the initiative. In the following year, the Brazilian Minister of Environment, José Sarney Filho, launched the 'Ecological Corridors' project, which integrated Brazil into the AAA Corridor (Campos Mello, 2019). Representatives of the ministries of environment and foreign affairs of the nine Amazonian countries met and expressed interest in forming a working group to discuss the project (Gaia Amazonas, 2020a). However, civil society groups have been the most active in this regard. A transnational coalition of eight Amazonian NGOs working hand in hand with indigenous peoples and other local communities named ANA has been consistently working to advance the initiative.[10] A proposal has been prepared with the aim of integrating the idea of connectivity into the next strategic agenda of the Amazon Cooperation Treaty Organisation (ACTO; Gaia Amazonas, 2020a). Moreover, two statements regarding the post-2020 global biodiversity framework (GBF) have recently been released (ANA, 2021, 2022). These draw from a series of public reflections and conversations between experts, academics and indigenous leaders promoted by ANA under the theme 'Amazon, connectivity and indigenous territories: Challenges for the new GBF'.[11]

ANA is encouraging governments to develop a regional perspective of the Amazon and pressing for political recognition of the forest as a critical component of the Earth's life support system. It is urging for both the establishment of national targets on ecosystem and sociocultural connectivity, and the inclusion of the intrinsic value of biodiversity in decision-making. The alliance is calling for the strengthening of a conservation model that acknowledges the role of indigenous lands and knowledge systems in both climate change mitigation and biodiversity protection, while demanding the creation of effective and adequate participation spaces for Amazonian indigenous peoples and other local communities in global environmental discussions. Among ANA's recommendations for the new GBF's text are setting specific, more ambitious conservation goals for key regions like the Amazon; including language about indigenous peoples and their lands in the new global biodiversity target; establishing support mechanisms for indigenous self-defined land planning and management models; and abandoning the utilitarian notion of 'ecosystem services'. As an alternative, the alliance proposes the adoption of a perspective that accredits life support systems; an approach that

conceives humans as part of the natural systems that sustain them. This vision resonates with that of indigenous peoples[12] (ANA, 2021, 2022).

In light of the above, it should come as no surprise that the transformative potential of the AAA initiative has been recognised by indigenous communities. In August 2018, representatives of 400 indigenous peoples met in Bogota to announce their support for the project (InfoAmazonia, 2018); in November, the proposal to create the corridor was put forward at the 14th Conference of the Parties of the Convention on Biological Diversity by the vice-president of the Coordinator of the Indigenous Organisations of the Amazon River Basin (COICA), Tuntiak Katan, who urged world leaders to commit to protect a 'sacred corridor of life and culture', 'the world's last great sanctuary for biodiversity' (McKenna, 2018). Indigenous peoples agreed to cooperate with NGOs and are currently collaborating to develop ways of incorporating their own concerns and perspectives into the project (Gaia Amazonas, 2020a). In their official declaration of endorsement of the initiative, Amazonian indigenous peoples affirmed their wish to be part of a new dialogue that transcends the boundaries of their communities. They invited national states, international organisations, public and private institutions, indigenist, environmental and social movements, traditional ancestral populations, academia, spiritual leaders representing the many expressions of faith and all those who identify with the project to join efforts to consolidate the corridor 'as a first step towards safeguarding the existence of all life forms on the planet'[13] (COICA et al., 2018).

4 | DISCUSSION

As previously seen, a transformative model of governance is integrative, inclusive, pluralist and adaptive. The integrative potential of the AAA Corridor initiative lies, first, in the fact that it is an ecological connectivity project. The implementation of connectivity-oriented strategies helps protect biodiversity and enhance ecosystem resilience and adaptability to climate change which, in turn, contributes to maintaining and increasing forest carbon stocks, while ensuring the flow of ecosystem goods and providing socioeconomic development opportunities for rural communities, thereby promoting change towards sustainability across issues and sectors. Second, because the connectivity between the Andes, the Amazon and the Atlantic is critical for safeguarding South America's water cycle and the regulation of the planet's climate, the positive impact of sustainability policies implemented through this project would be felt well beyond the corridor. Third, efforts by ANA to include the concept of connectivity into strategies, plans and policies on multiple levels are evidence that those working on the project are aware of the need to promote transformative change towards sustainability and build coherence across governance scales.

The initiative's goal of cultivating the connectivity of human relations in and beyond the Amazon, along with its normative commitments to empowering indigenous and other local communities and respecting the rights of nature, reflect its inclusive potential. Building on the successful intercultural experience of the COAMA programme and animated by an indigenous worldview, the initiative seeks to radically transform existing power dynamics across the Amazon through ensuring full and effective participation by marginalised populations in decision-making, and incorporating the non-anthropocentric values of indigenous peoples into governing processes and practices.

Finally, the pluralist and adaptive potential of the initiative inheres in the recognition of the need to stimulate the co-production of knowledge by implementing horizontal governance models that allow for continuous learning, experimentation and reflexivity. ANA envisions the AAA Corridor as a laboratory wherein adaptive solutions to urgent socioecological problems are developed through the integration of conventional, indigenous and traditional knowledge systems; a space for permanent reciprocal dialogue and collaborative policy design and implementation.

However, the implementation of the project has been strongly conditioned by the political, economic and social dynamics of the region. The AAA Corridor was unsurprisingly described by the Brazilian military forces and President Bolsonaro as a threat to Brazil's territorial integrity and sovereignty over the Amazon (Angelo, 2019). In response, Martín von Hildebrand (cit. in Campos Mello, 2019) asserted that 'sovereignty is not isolation, sovereignty is solidarity'. Regrettably, the strong anti-environmentalist orientation of some national governments and the turbulent circumstances of the past few years in many Amazonian countries – affected by political instability, corruption scandals, economic crises and rising levels of crime and violence (Pereira & Viola, 2022b) – have not been favourable for transboundary solidarity and the creation of the world's largest ecological corridor. The election of presidents who explicitly (in the case of Bolsonaro in Brazil) or implicitly (in the case of Duque in Colombia) reject environmental imperatives has presented a major obstacle to this project. In addition, fighting present economies and policies that are built upon input-intensive methods of production, and the powerful actors that are associated with them, is proving to be a challenging task for socioenvironmental movements (Pereira & Viola, 2022b).

Yet there may currently be a window of opportunity for the advancement of the project. In October 2022, former Brazilian President Lula da Silva won the presidential election against Bolsonaro, securing 51% of the popular vote. Lula, who is supported by notable environmentalist Marina Silva, vowed to fight for zero

deforestation and promote sustainable development in the Amazon, and create an indigenous ministry; he also expressed his willingness to build international partnerships that could help Brazil achieve its socioenvironmental goals (UOL, 2022a, 2022b). From January 2023, there will be a shift in the country's environmental policy. Lula could help unblock the AAA Corridor project. In the past, his administrations not only implemented a successful deforestation control policy in the Amazon (Pereira & Viola, 2022b), but also followed an assertive and ambitious foreign policy aimed at raising Brazil's profile in the world (Roett, 2010). After 4 years of profound deterioration of the country's international image (partly driven by a disastrous Amazonian policy), such an audacious, large-scale initiative to protect the Amazon could be well-received and promoted by Lula.

The new Brazilian administration will, nevertheless, face major challenges, namely the Herculean task of rebuilding the environmental institutions that have been seriously damaged over the past 4 years; the presence of a stronger organised crime network in the Amazon; Amazonian governors who are politically and ideologically aligned with Bolsonarism; the high number of anti-environmentalist lawmakers in the newly-elected Congress; and a divided country. On the other hand, the control of deforestation in the Amazon has recently become a growing concern among a significant part of Brazilian elites. This is explained by European opposition to ratification of the trade deal with Mercosur, criticism by international investors, the election of a pro-environment president in the United States in 2020 and increased awareness among the Brazilian business sector of the Amazon's major potential to provide credits for carbon offsetting. This has empowered Brazilian pro-environmental forces, who should capitalise on this moment to expose the limitations of entrenched power relations and predatory developmentalist discourses (Pereira & Gebara, 2022), and create alternative, powerful narratives of change than can reach the wide public and encourage the questioning of prevailing social-structuring paradigms (Chaffin et al., 2016). Such counter-hegemonic narratives could be considerably strengthened if they incorporated the socioeconomic needs and concerns arising from the impact of the COVID-19 pandemic; crises may provide opportunities to innovate and weaken status quo governance (Chaffin et al., 2016; Scoones et al., 2020). This could promote a broad consensus within society around the urgency to both transform existing governance practices in the Amazon and develop sustainable processes of co-creation (rather than exploitation) between humans and nature (Pereira & Gebara, 2022).

In Colombia, former guerrilla Gustavo Petro was elected the first leftist president in the country's history in June 2022, with a transformative agenda. Petro, who chose a notable environmentalist, Francia Márquez, to serve as his vice-president, has a set of well-crafted proposals for the environmental sector in Colombia aimed at overcoming extractivism, and has promised to democratise the national economy (Programa de Gobierno 2022–2026, 2022). Following Lula's election on 31 October, the Colombian president posted on Twitter his priorities for a common agenda with Brazil, placing the Amazon at the top of the list (Petro, 2022). An alliance between Lula and Petro – in close collaboration with ANA, representatives of Amazonian indigenous and other local communities, academics, international donors and the most reformist branches of the private sector[14] – could galvanise support for the AAA Corridor across the region.

Finally, the implementation of the project or any other transformative governance project aimed at protecting and restoring connectivity would greatly benefit from a global framework that both recognises landscape restoration as a cost-effective nature-based solution for climate change, biodiversity loss and human development, and supports countries in addressing their needs, challenges and barriers (Bustamante et al., 2019). This is critical at a time when Latin America is re-emerging from the deepest recession in its history (OECD et al., 2021). At the same time, consistent social science research on the topic could help promote the integration of the concepts of socioecological fragmentation and connectivity into plans, policies and governance practices on different levels.

Notwithstanding its transformative potential, translating this project from theory into practice may also raise some problems. Covering one-third of the Amazon, the AAA Corridor would be a major step towards the protection of the Earth's most crucial ecosystem from the growing pressures of deforestation and climate change. However, even if it is implemented, its magnitude and high level of ambition may risk obscuring or legitimising even further the exploitation of the human and non-human populations that live in the remaining two-thirds of the region. To redress this, it is crucial to ensure that other transformative governance initiatives, underpinned by a concern with ecosystem and sociocultural connectivity, are also considered and implemented. In particular, efforts to create the AAA Corridor must not in any case divert attention away from the southern and eastern Amazon – the most deforested, degraded and fragmented part of the biome – where the implementation of an ambitious reforestation policy is critical (Lovejoy & Nobre, 2019). Moreover, implementation should consider existing power imbalances and inequalities in Amazonian societies with a view to prevent elite capture of the project's agenda. In Brazil, control of the transition towards bioeconomy by corporate agribusiness is disproportionately benefiting the already-dominant actors and concentrating economic benefits in a few hands, while preserving unsustainable systems under the pretext of green progress (Bastos Lima, 2021). This raises warning signs for the

AAA Corridor initiative and reinforces the importance of building and strengthening coalitions of like-minded actors representing transformative sustainability values (Visseren-Hamakers et al., 2021).

5 | CONCLUSION

Inspired by the framework of transformative governance, this article has provided a critique and reconsideration of governance and sustainability practices in an ecosystem of planetary importance. It has exposed how the fragmented, exclusionary and anthropocentric governance of the Amazon has become a major obstacle to regional sustainable development, and presented the AAA Corridor initiative as an example of a truly alternative governance approach for the region. The article suggested that the initiative's explicit commitment to the normative and operational principles of transformative governance makes it particularly well-suited to redressing the problems resulting from hegemonic modes of governance, and responding to the complexity and instability of the Anthropocene. In doing so, it also showed that transformative governance offers a solid normative basis for an analytical and practical approach to the challenges of the new geological epoch.

As recently noted by Bornemann (2021, p. 325), the academic discourse on Anthropocene governance 'lacks an explicit clarification and justification of its normative foundations and implications'; moreover, few studies have 'elaborate[d] how sustainability-related norms (…) tie in with scientific Anthropocene diagnoses and translate into real world contexts'. Through this in-depth case study, we hope to have provided an example of an 'analytically sound', 'normatively justified' and 'empirically illuminated' approach to sustainability governance in the Anthropocene (Bornemann, 2021, p. 325) which can be of use for both practitioners and researchers working in the field.

At the same time, while there is growing scholarly concern with the Anthropocene and planetary politics within International Relations and related fields, the existing literature has mainly focused on examining how the new geological epoch challenges the concepts, theories and institutions of world politics, and on advancing alternative legal, political and ethical frameworks within which to think about our current predicament (Burke et al., 2016; Chandler et al., 2021; Cudworth & Hobden, 2018; Harrington, 2016; Harrington & Shearing, 2017; Kotzé, 2017; Lövbrand & Mobjörk, 2021; McDonald, 2021; Pereira & Saramago, 2020). With this article, we have helped move this broader research agenda more explicitly from theory to practice.

Finally, by foregrounding a region and conducting an analysis of the immanent possibilities, barriers and challenges for advancing transformative change on the ground, our study has also contributed to the recent, growing body of literature that is moving the transformative governance research agenda forward, from a conceptual discussion of the term and its application to particular issue-areas (e.g. biodiversity loss, climate change) towards the collection of empirical data and the drawing of lessons for sustainability transformations (Aguiar et al., 2021; Coffey et al., 2022; Pascual et al., 2022; Pickering et al., 2022; Rusch et al., 2022).

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DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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ENDNOTES

[1] Also referred to as 'transformative environmental governance' (Chaffin et al., 2016), 'transformative governance of biodiversity', 'transformative governance of sustainable development' (Visseren-Hamakers et al., 2021) or 'transformative climate governance' (Hölscher & Frantzeskaki, 2020). It is defined as the set of rules, rule-making systems and actor networks at multiple levels that enable transformative change (Visseren-Hamakers et al., 2021).

[2] While the scientific community has increasingly emphasised the need for transformative change, few attention has been given to how to promote and govern such change; transformative governance is a recently emerged concept. Visseren-Hamakers et al. (2021) conducted an extensive literature review to conceptualise this new idea. The authors combined the different emerging governance approaches (integrative, inclusive, pluralist and adaptive) relevant to the protection of biodiversity and the promotion of sustainable development found in the literature, and offered a set of suggestions on how to operationalise them to enable transformative change. Their conceptualisation of transformative governance responds to the main challenges posed by the Anthropocene to environmental governance discussed in the literature on the topic (see, for instance, Bornemann, 2021). We therefore consider that transformative governance provides an adequate framework for thinking about and navigating the new geological epoch.

[3] For an in-depth analysis of the governance of the Amazon in Brazil, Peru, Bolivia and Colombia, see Pereira and Viola (2022b).

[4] Areas aimed at protecting the livelihoods and cultures of traditional populations, and ensuring the sustainable use of nature, such as extractive reserves (RESEX) and sustainable development reserves (RDS).

[5] On this topic, see, for instance, Hochstetler and Keck (2007) and Bratman (2019).

[6] Yet command and control policy instruments have had significant results in reducing deforestation in Brazil (Gandour, 2021).

[7] These include, for example, the Jaguar Corridor Initiative and the Putumayo Biological and Cultural Corridor Initiative.

[8] Martín von Hildebrand has dedicated most of his life to indigenous peoples and the Amazon. He travelled to the region in the early 1970s to learn about indigenous visions of the world and conservationist methods, and eventually became the greatest promoter of indigenous rights in Colombia and a distinguished environmentalist. The fact that today more than 200,000 km^2 of native community land in the country are recognised and protected by the state can be largely attributed to the political and activist work of von Hildebrand (von Hildebrand & Brackelaire, 2012; Zárate, 2019). His commitment to the indigenous cause has earned him multiple awards, such as the Right Livelihood Award (1999), the Colombian National Environmental Prize (1999), the Most Excellent Order of the Golden Ark (2004), the Skoll Award for Social Entrepreneurship (2009) and the World Economic Forum Social Entrepreneur Award (2009).

[9] See the documentary entitled *El sendero de la anaconda* (*The path of the anaconda* in English): https://www.imdb.com/title/tt10577906/.

[10] See https://alianzanoramazonica.org/.

[11] The videos of the events can be found here: http://alianzanoramazonica.org/conferencias2021/.

[12] For a reading of Amazonian indigenous peoples' deeply relational, more-than-human ontologies and knowledge, see, for instance, Inoue (2018) and Pereira and Gebara (2022).

[13] Authors' translation from Spanish.

[14] For example, the Brazilian Coalition on Climate, Forests and Agriculture (https://www.coalizaobr.com.br/home/), which has been an active voice against the anti-environmentalist policies of the Bolsonaro administration.

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