



## The Amazon as a Planetary Legal Site: Reading International Law in the Anthropocene Through the Amazon

El Amazonas como Lugar Jurídico Planetario: Lectura del Derecho Internacional en el Antropoceno a través del Amazonas

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### Abstract

This article examines how the Amazon Basin reveals structural tensions in international law in the Anthropocene. Rather than treating it as a bounded object of regulation or a regional case, it conceptualizes the Amazon as a planetary legal site where the limits of modern legal ordering become visible. Its ecological interdependence, transboundary dynamics, and indigenous territorial governance expose frictions with jurisdictional, epistemic, and normative assumptions of international law. The article identifies three tensions: between ecological interdependence and jurisdictional fragmentation; the marginalization of Indigenous legal orders within state-centered frameworks; and the persistence of anthropocentric legal reasoning. It proposes reorienting international law by approaching jurisdiction as relational, embracing epistemic pluralism, and recognizing ecological processes as sources of normative orientation.

**Keywords:** International Law; Anthropocene; Amazon; Jurisdiction; Indigenous Legal Pluralism; Ecological Normative Orientation

### Resumen

Este artículo examina cómo la cuenca amazónica pone de manifiesto tensiones estructurales en el derecho internacional en el Antropoceno. En lugar de tratarla como un objeto de regulación delimitado o un caso regional, conceptualiza la Amazonía como un escenario jurídico planetario en el que se hacen visibles los límites del ordenamiento jurídico moderno. Su interdependencia ecológica, sus dinámicas transfronterizas y la gobernanza territorial indígena ponen de manifiesto fricciones con los supuestos jurisdiccionales, epistémicos y normativos del derecho internacional. El artículo identifica tres tensiones: entre la interdependencia ecológica y la fragmentación jurisdiccional; la marginación de los ordenamientos jurídicos

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Article received on January 6<sup>th</sup>, 2025, and accepted for publication on January 23<sup>th</sup>, 2026. Translated by Daniela Pavez.

How to cite this article:

BEJARANO MARTÍNEZ, Carolina (2026). "The Amazon as a Planetary Legal Site: Reading International Law in the Anthropocene Through the Amazon", *Latin American Legal Studies*, Vol. 14 N° 1, pp. 167-217.

indígenas dentro de marcos centrados en el Estado; y la persistencia del razonamiento jurídico antropocéntrico. Propone reorientar el derecho internacional abordando la jurisdicción como relacional, adoptando el pluralismo epistémico y reconociendo los procesos ecológicos como fuentes de orientación normativa.

**Palabras clave:** Derecho internacional; Antropoceno; Amazonía; Jurisdicción; Pluralismo jurídico indígena; Orientación normativa ecológica.

## INTRODUCTION

In this article, I use the symbolic, ecological, and aesthetic power of the Amazon Basin to explore the tensions that international law faces in times of ecological crisis in the Anthropocene.<sup>2</sup> The Amazon is approached not merely as an object of environmental regulation, but as a landmark ecosystem that exposes structural frictions within modern international law when it is confronted with planetary ecological interdependence. Its planetary relevance, its radical ecological interconnectedness, and its long history of Indigenous habitation make the Amazon a particularly revealing site from which to examine how international law grapples with ecological interdependence, jurisdictional authority, and the governance of socio-ecological systems in the Anthropocene.

The Amazon occupies a powerful place in the global social imaginary. It is often described as the "lungs of the planet,"<sup>3</sup> a metaphor that highlights both its planetary ecological function,<sup>4</sup> and its interconnectedness with various earth systems.<sup>5</sup> It is also home to numerous Indigenous peoples, including some of the last remaining uncontacted peoples on Earth,<sup>6</sup> whose ways of life are inseparable from the forest and its ecological cycles. In parallel, the Amazon is subject to accelerating deforestation, extractivism, industrial agriculture,<sup>7</sup> and increasingly volatile climatic phenomena such as prolonged droughts,<sup>8</sup> and large-scale forest fires.<sup>9</sup> At the same time, the broader Amazon Basin is witnessing processes of urbanization and rapid city growth,<sup>10</sup> creating tensions between different

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<sup>2</sup> Everything I know and think about the Anthropocene and the role of law in this era, I have learned in the great company of Catalina Rivera. Together, we write and teach on this topic. I am deeply grateful to Catalina and our students for giving me the opportunity to engage in this particular way of collective thinking, characterized by care, friendship and love. In this sense, the ideas I present here are not only informed by these experiences but are deeply rooted in them. Knowledge is collective, though unfortunately, we cannot always write together. See: BEJARANO & RIVERA, *Hacia un Derecho Salvaje para el Antropoceno: Tres Estrategias Metodológicas*, (upcoming in Uniandes Ediciones).

<sup>3</sup> This characterization is supported by various studies that emphasize the Amazon's critical role in carbon dioxide absorption and oxygen production, reinforcing its status as a vital global carbon sink and a significant contributor to the Earth's atmospheric balance. See: COELLO (2016); MA et al. (2022).

<sup>4</sup> Furthermore, the Amazon's biodiversity and its capacity to sequester carbon make it an essential component in discussions of climate change and environmental sustainability. See: MUTHEE et al. (2022); ARAGÃO et al. (2014).

<sup>5</sup> The Amazon rainforest, which is commonly cited to produce a substantial portion of the Earth's oxygen, is crucial not only for local ecosystems but also for global climate regulation. See: MA et al. (2022).

<sup>6</sup> The cultural and biological diversity of the Amazon is closely linked to the indigenous populations that inhabit it, who have developed sophisticated systems of land management and sustainable practices over centuries. See: HECKENBERG (2014). The Amazon's indigenous peoples not only contribute to the ecological health of the region but also embody a rich cultural heritage that is vital for understanding the social dynamics of the Anthropocene. See: SCHWAB (2023).

<sup>7</sup> HADDAD, ARAÚJO & NOBRE (2024).

<sup>8</sup> WUNDERLING et al. (2022); GLOOR et al. (2013).

<sup>9</sup> CUNNINGHAM, WILLIAMSON & BOWMAN (2024); RIBEIRO et al. (2024).

<sup>10</sup> CAMPAÑA CARRERA (2025); DE CARVALHO & SZLAFSZTEIN (2025).

forms of habitation and conservation.<sup>11</sup> These dynamics make the Amazon a paradigmatic case for examining some challenges and the capacity of international law to respond to ecological crisis across interconnected local, regional, and planetary scales.

Despite the proliferation of international environmental treaties, human rights instruments, and regional cooperation mechanisms applicable to the Amazon, international law continues to struggle to address the broader ecological challenges reflected in the region and extending across global and planetary scales.<sup>12</sup> This article argues that these struggles cannot be explained solely by gaps in regulation, implementation or lack of political will. Rather, they reveal a set of deeper structural tensions embedded in the conceptual foundations of international law itself. In particular, the Amazon brings into sharp relief three interrelated structural tensions that characterize international law in the Anthropocene: first, the tension between jurisdictional fragmentation and ecological interdependence; second, the tension between state-centered jurisdiction and territorially grounded legal pluralism; and third, the tension between anthropocentric legal reasoning and forms of ecological normative orientation.

Before turning to the Amazon specifically, the article situates these tensions within broader debates on law and the Anthropocene. Although the designation of the Anthropocene as a formal geological epoch remains contested within the natural sciences,<sup>13</sup> the concept has proven analytically productive across humanities<sup>14</sup> and socio-legal scholarship.<sup>15</sup> In this article, the Anthropocene is used not as a settled scientific claim, but as a critical framework for examining how law operates under conditions of radical ecological uncertainty, planetary interdependence, and increasingly visible limits to human control over Earth systems.<sup>16</sup>

The article does not treat the Amazon as a case study or a bounded regional example. Instead, it is approached as a planetary legal site. In this sense, the Amazon functions as a lens through which broader structural tensions of international law in the Anthropocene become particularly visible; its ecological dynamics exceed territorial borders, its governance involves overlapping and often conflicting legal orders, and its degradation carries consequences that unfold across local, regional, and planetary scales. Approaching the Amazon in this way allows the article to engage with general questions of international law's conceptual architecture while remaining grounded in a concrete socio-ecological system that brings these tensions into sharp relief.

From this perspective, the Amazon functions as more than a regional environmental concern. It becomes a site through which to observe how international law continues to regulate ecosystems as fragmented spaces divided by state borders, even as the ecological processes that sustain them operate across scales that exceed territorial jurisdiction. The legal governance of the Amazon remains largely structured around state sovereignty and inter-state cooperation, while Indigenous peoples—whose legal orders, territorial practices, and ecological knowledge have historically co-produced and

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<sup>11</sup> ANDOKE (2023); VALOIS & CARTAXO (2022).

<sup>12</sup> WUNDERLING et al. (2022); MARTIN et al. (2021).

<sup>13</sup> BARNOSKY (2024).

<sup>14</sup> OJEDA, SASSER & LUNDSTRUM (2020); CHAKRABARTY (2009).

<sup>15</sup> RIVERA (2024); CHAPAUX, MÉGRET & NATAJARAN (2023).

<sup>16</sup> For a comprehensive understanding of the challenges law faces in the Anthropocene, see BURDON & MARTEL (2023).

sustained the forest—remain marginal within international legal frameworks, or are recognized only instrumentally, as stakeholders or repositories of “traditional” knowledge.<sup>17</sup>

Building on this diagnosis, the article does not seek to offer a comprehensive theory of law in the Anthropocene, nor does it propose a fully developed alternative legal regime. Instead, it explores how the tensions revealed by the Amazon open up three possible pathways for reorienting international law in this context. These pathways are framed as proposals rather than solutions, and as responses to identifiable structural tensions rather than as prescriptive models.

The first proposal concerns jurisdiction. Instead of prescribing a comprehensive restructuring of international law, the article explores the possibility of reimagining jurisdictional arrangements in ways that better align legal authority with ecological realities and with the plurality of legal orders governing territory. State borders fragment ecosystems that function as integrated wholes, while Indigenous jurisdictions are subordinated or ignored. The article explores the possibility of reimagining jurisdictional arrangements in ways that better align legal authority with these socio-ecological realities and that take seriously the plurality of legal orders governing this territory.

The second proposal addresses Indigenous legal pluralism as a jurisdictional challenge for international law in the Anthropocene. Rather than approaching Indigenous peoples primarily as holders of rights or sources of culturally specific knowledge, the article examines how Indigenous legal orders in the Amazon function as legally meaningful forms of territorial governance that unsettle state-centered assumptions about authority over ecological space. It argues that international law’s reliance on singular, territorially bounded jurisdiction obscures the existence of plural and overlapping forms of legal authority grounded in long-term relationships with land, water, and non-human life. By bringing Indigenous jurisdictions into view, the article shows that international law cannot meaningfully engage with ecological interdependence while continuing to treat sovereignty as the exclusive locus of territorial governance. Recognizing Indigenous legal pluralism does not entirely entail displacing state authority, but it does require rethinking jurisdiction as a relational and ecologically embedded practice rather than a uniform expression of state sovereign control.

The third proposal concerns normativity. The ecological crises unfolding in the Amazon expose the limits of a legal system that treats nature solely as an object of regulation or a resource for human use.<sup>18</sup> Without purporting to offer a fully developed theory of ecological normativity, this proposal seeks to clarify how ecological processes could operate as sources of normative orientation that shape the horizon of legal reasoning without displacing human-made law. Developing a legal sensibility attuned to ecological forms of normative orientation does not require abandoning human-made law, democratic decision-making, or human rights. It does, however, require rethinking how legal orders relate to the ecological processes they seek to govern, particularly when those processes render certain legal choices increasingly unsustainable or incoherent.

This article does not offer a comprehensive blueprint for legal reform, but rather advances three pathways that respond to structural tensions within international law as they become visible in the Amazon. Taken together, these proposals point toward a more ecologically attuned orientation of international law, one that moves beyond strictly anthropocentric and state-centered frameworks without claiming a fully articulated ecocentric model.<sup>19</sup> By doing so, the article contributes to ongoing

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<sup>17</sup> FAUNDES (2022).

<sup>18</sup> A classical critique on the matter can be found in CULLINAN (2011).

<sup>19</sup> For this kind of interventions see: PARDI (2025); KOTZE & FRENCH (2018).

debates on international law, environmental governance, and the law in the Anthropocene, and opens space for rethinking legal foundations in light of the interconnectedness of life on Earth.

The article unfolds in two levels. It first identifies three structural tensions that shape international law in the Anthropocene as they come into focus through the Amazon: the tension between ecological interdependence and jurisdictional fragmentation; between state-centered legal frameworks and Indigenous legal pluralism; and between anthropocentric legal reasoning and alternative forms of ecological normative orientation. Building on this diagnosis, the article advances three corresponding analytical moves that respond to these tensions. These moves are deliberately modest. They aim to clarify alternative ways of reasoning within international law that can enhance its ecological attentiveness while remaining anchored in its existing normative vocabulary and institutional constraints.

## I. ECOLOGICAL INTERDEPENDENCE AND JURISDICTIONAL FRAGMENTATION THROUGH THE AMAZON BASIN

### 1.1 Jurisdictional fragmentation

International law in the Anthropocene is increasingly confronted with a structural mismatch between the ecological phenomena it seeks to regulate and the jurisdictional architecture through which it operates. Ecological systems function through complex, interconnected processes that transcend political borders, legal compartments, and institutional mandates. By contrast, international law remains largely organized around territorially bounded jurisdictions, functionally segmented regimes, and state-centered allocations of authority.<sup>20</sup> This section argues that the Amazon Basin brings this tension into particularly sharp relief, not merely as an object of environmental concern, but as a planetary legal site that exposes the limits of jurisdictional fragmentation in an era of intensified ecological interdependence.

The Amazon Basin makes legible, in an especially tangible way, the forms of ecological interconnectedness that structure ecosystems across the planet. Its hydrological cycles extend far beyond national borders, shaping rainfall patterns across South America and influencing global climatic systems.<sup>21</sup> Rivers, forests, soils, and atmospheric processes operate as a tightly coupled socio-ecological system whose dynamics cannot be meaningfully contained within the territorial boundaries of any single state.

This interconnectedness is not merely theoretical or abstract, but is materialized through concrete ecological processes that operate across multiple spatial and temporal scales. For instance, moisture generated through evapotranspiration in the Amazon rainforest travels through atmospheric circulation patterns toward the Andes,<sup>22</sup> where it contributes to rainfall regimes that sustain highland ecosystems and urban water supplies in major Andean cities such as Bogotá.<sup>23</sup> These so-called “flying rivers” illustrate how ecological processes originating in the Amazon shape socio-ecological conditions far beyond the basin itself.<sup>24</sup> At a planetary scale, the fertility of Amazonian soils is in part

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<sup>20</sup> RAJKOVIC (2020)

<sup>21</sup> DA SILVA GUEVARA (2018); CASTELLO (2013); DAVIDSON & ARTAXO (2004).

<sup>22</sup> ARRAUT et al. (2012).

<sup>23</sup> VIZY & COOK (2007).

<sup>24</sup> FINER et al. (2025); WEBB (2018).

sustained by mineral dust transported across the Atlantic from the Sahara Desert, revealing material connections that link distant ecosystems through global atmospheric systems.<sup>25</sup> Taken together, these processes underscore that the Amazon cannot be understood as a self-contained territorial space, but rather as a nodal site within planetary ecological dynamics.

In the Anthropocene, the legal significance of such interdependencies is intensified, as localized decisions generate ecological consequences that extend far beyond the sites and actors from which they originate. As deforestation, biodiversity loss, and climate change accelerate, these interconnected ecological processes increasingly operate through non-linear feedback loops, generating cascading effects across local, regional, and global scales.<sup>26</sup> What were once background conditions of ecological connectivity now emerge as central drivers of environmental risk and socio-ecological vulnerability, bringing into sharper focus the limits of territorially bounded legal frameworks.<sup>27</sup>

Yet the legal governance of the Amazon remains deeply fragmented. The basin spans the territories of multiple sovereign states, each exercising jurisdiction primarily within its own borders and according to its own domestic legal frameworks. At the international level, regulatory authority is dispersed across a plurality of legal regimes addressing environmental protection,<sup>28</sup> climate change,<sup>29</sup> biodiversity,<sup>30</sup> trade, investment, and human rights. These regimes are governed by distinct principles, institutional arrangements, and enforcement mechanisms, and they often operate in parallel or in tension rather than in coordination. The result is not simply regulatory overlap or inefficiency, but a structural disjunction between the spatial logic of ecological processes and the spatial logic of state legal authority.

Even though International law has developed certain frameworks to regulate transboundary ecosystems, such as the regimes governing transboundary rivers,<sup>31</sup> or extraterritorial attribution of responsibility,<sup>32</sup> and more recently scholars have argued in favor of forms of common stewardship for some ecosystems,<sup>33</sup> these approaches continue to position the state as the central actor, and as the primary scale of international legal understanding.<sup>34</sup> Although international law advances claims of globality, it continues to operate largely through the institutional and conceptual framework of the nation-state. By dividing the globe into sovereign states, international law has not only fragmented human communities but also the ecosystems they inhabit.

This disjunction cannot be adequately understood as a problem of insufficient cooperation or lack of political will alone. While coordination mechanisms and regional agreements exist, such as the Amazon Cooperation Treaty of 1978, they remain embedded within a jurisdictional framework that presupposes territorially bounded authority as the primary organizing principle of the legal order.<sup>35</sup>

Ecological interdependence, by contrast, challenges this assumption by revealing forms of connectivity that are indifferent to state borders and resistant to compartmentalization, insofar as

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<sup>25</sup> BEN-AMI & ANDREAE (2010); YU et al. (2015); RIZZOLO, BARBOSA & GODOI (2016); WANG et al. (2022); GONZALEZ & BRIOTTET (2017); BEHZAD, MINETA & GOJODORI (2018); PROSPERO et al. (2020).

<sup>26</sup> LAWRENCE, BLACKETT & CRADOCK-HENRY (2020).

<sup>27</sup> TOSUN & PETERS (2021); MOLONEY, FÜNFELD & GRANBERG (2017).

<sup>28</sup> For example, the Amazon Cooperation Treaty.

<sup>29</sup> United Nations Framework Convention on Climate Change.

<sup>30</sup> United Nations Convention on Biological Diversity.

<sup>31</sup> See for example the regulatory work of UN Waters.

<sup>32</sup> INTER-AMERICAN COURT ON HUMAN RIGHTS, Advisory Opinion 23/2017.

<sup>33</sup> BECERRA (2022); RIDINGS (2018).

<sup>34</sup> DE LUCIA (2023).

<sup>35</sup> GARCIA (2011).

ecological processes unfold through transboundary, cross-scalar, and non-linear dynamics that cannot be meaningfully captured by territorially bounded jurisdictions or functionally segmented legal regimes. In this sense, the Amazon does not merely illustrate the difficulties of transboundary environmental governance; it destabilizes the conceptual foundations through which international law defines scale, jurisdiction, and authority.<sup>36</sup>

The Amazon's significance in this regard is not reducible to its geographical location or ecological uniqueness. Rather, it lies in the way the basin condenses multiple dimensions of planetary ecological interdependence into a single ecosystem that is nevertheless governed through fragmented and territorially bounded legal spaces. The cumulative effects of land-use change, extractive activities, and climatic variability generate impacts that unfold across local, regional, and global scales simultaneously.<sup>37</sup> These dynamics strain legal frameworks premised on linear causality, discrete territorial harms, and clearly attributable sources of responsibility. As ecological thresholds are approached or crossed, the limitations of fragmented jurisdictional approaches become increasingly apparent. As noted by Essén and Lambin, jurisdictional approaches often operate within a complex network of policies that may not align with ecological needs, resulting in inadequate protection of ecosystems.<sup>38</sup> This is particularly concerning in light of the ongoing environmental crises, such as forest fires and droughts, which underscore the urgency for a more cohesive and ecologically informed governance framework.

Approaching the Amazon as a planetary legal site thus allows for a critical re-examination of jurisdictional fragmentation as a structural feature of international law in the Anthropocene. The tension at stake is not merely between different states or legal regimes, but between competing conceptions of space, authority, and governance.<sup>39</sup> On the one hand, international law continues to rely on territorial jurisdiction as the primary means of organizing legal competence.<sup>40</sup> On the other, ecological interdependence demands forms of legal reasoning capable of engaging with processes that operate across borders, scales, and temporal horizons. The Amazon renders this tension visible, exposing the limits of existing jurisdictional arrangements when confronted with planetary ecological realities.

What is at stake, therefore, is not merely the effectiveness of existing environmental regimes, but the adequacy of the spatial and jurisdictional assumptions through which international law conceptualizes legal authority in the Anthropocene. These limits become even more pronounced when jurisdictional fragmentation intersects with the plurality of legal orders governing territory within the Amazon, an issue addressed in the following section.

## 1.2 Towards interconnected and situated jurisdictions

Rather than advancing a comprehensive institutional redesign of international jurisdiction, which clearly exceeds the scope of this paper, this section proposes a more modest but conceptually significant shift: approaching ecological interdependence as a structuring consideration in the interpretation and allocation of jurisdictional authority. Seen from the Amazon as a planetary legal

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<sup>36</sup> McVEIGH (2019); VALVERDE (2019).

<sup>37</sup> COVEY et al. (2021).

<sup>38</sup> ESSÉN & LAMBIN (2021).

<sup>39</sup> MEDVEDIEVA (2022); MOLONEY, FÜNGELF & GRANBERG (2017).

<sup>40</sup> McVEIGH & PAHUJA (2022); McVEIGH (2019).

site, jurisdiction need not be conceived exclusively as a territorially fixed competence exercised by discrete sovereign actors, but as a relational and ecologically situated practice, attentive to the material connections through which ecological harm and responsibility are produced.

This reorientation also opens conceptual space for jurisdictional arrangements that are provisional, transitory, and context-sensitive. In situations in which ecological processes unfold across multiple legal orders and territorial boundaries, governance need not be monopolized by a single authority or permanently anchored in a fixed jurisdictional design. Instead, different existing authorities, as well as institutions created contingently in response to specific ecological risks or thresholds, may coordinate their competences to govern shared ecosystems.<sup>41</sup> Such arrangements do not presuppose the emergence of a unified or centralized legal order; rather, they acknowledge the fragmented landscape of international law while allowing for forms of cooperation and coordination that are responsive to ecological interdependence and interconnectedness.

Under this perspective, the central question is not only where jurisdiction is formally located, but how legal authority and responsibility can be articulated across overlapping and evolving jurisdictional spaces. Ecological interdependence thus operates as a normative orientation that informs how jurisdictional claims are justified, aligned, and recalibrated in light of interconnected socio-ecological dynamics, without displacing territorial jurisdiction as such. Approaching the Amazon in this way highlights the limits of rigid jurisdictional architectures and invites international law to experiment with more flexible, ecologically attuned modes of governance in the Anthropocene.

## II. INDIGENOUS LEGAL PLURALISM AND TERRITORIAL GOVERNANCE IN AND BEYOND THE AMAZON

### 2.1 The invisibility and subordination of Indigenous jurisdictions

The jurisdictional fragmentation discussed in the previous section not only manifests itself in the proliferation of overlapping state competences and international regimes governing interconnected ecosystems such as the Amazon. It also operates through a subtler, yet equally consequential, dynamic: the systematic privileging of state-based jurisdiction at the expense of other forms of territorial authority. The division of ecological space into sovereign jurisdictions not only fragments ecosystems, but also marginalizes legal orders that do not conform to the spatial and institutional logic of the modern state. This dynamic is particularly visible in the Amazon, where the tension between ecological interconnectedness and jurisdictional fragmentation intersects with the presence of Indigenous legal orders that govern territory through normative systems grounded in ecological relations rather than territorial exclusivity.<sup>42</sup> The challenge posed by Indigenous legal pluralism thus cannot be understood as separate from the broader problem of jurisdictional fragmentation.<sup>43</sup> Rather, it exposes how international law's reliance on state-centred jurisdiction simultaneously fragments ecosystems and obscures the plurality of legal authorities that inhabit and govern those same ecological spaces.<sup>44</sup>

International legal engagements with the Amazon have traditionally been structured around two interconnected paradigms: state sovereignty and inter-state cooperation.<sup>45</sup> Even where international environmental law and human rights law acknowledge the global ecological relevance of the region

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<sup>41</sup> BEJARANO (2025).

<sup>42</sup> VARGAS RONCANCIO (2021).

<sup>43</sup> BACCA (2018).

<sup>44</sup> BACCA et al. (2023).

<sup>45</sup> GARCÍA (2011).

and the presence of Indigenous peoples, governance is largely imagined as a function of sovereign states acting individually or collectively.<sup>46</sup> This state-centered architecture has proven incapable of fully apprehending the territorial realities of the Amazon, not only because of its ecological interconnectedness, but also because it systematically marginalizes the plurality of legal orders that govern life and territory within the basin. The focus of this section is not to offer an exhaustive account of Indigenous rights in international law, but to examine how Indigenous legal orders in the Amazon unsettle the jurisdictional assumptions embedded in state-centered models of international governance.

From the perspective of international law, Indigenous peoples in the Amazon are primarily addressed through the language of rights.<sup>47</sup> Instruments such as the United Nations Declaration on the Rights of Indigenous Peoples and the jurisprudence of regional human rights bodies have progressively recognized Indigenous peoples' collective rights to land,<sup>48</sup> culture,<sup>49</sup> self-determination, and participation in decision-making processes.<sup>50</sup> While these developments are normatively significant, they remain embedded within a framework that treats Indigenous peoples as subjects to be protected rather than as legal authorities exercising jurisdiction over territory.<sup>51</sup> As a result, Indigenous legal orders are rendered visible only insofar as they are filtered through state recognition and international supervision.<sup>52</sup>

This limitation becomes particularly evident in regional cooperation frameworks such as the Amazon Cooperation Treaty. Although the treaty is often presented as a mechanism for overcoming the fragmentation of national approaches to the Amazon through coordinated governance, it remains firmly anchored in the sovereign authority of Amazonian states, as the Indigenous social mobilizations showed in 2025.<sup>53</sup> Cooperation is conceived as an inter-state endeavor, while Indigenous peoples appear, at most, as stakeholders within state-defined processes. The ACT thus illustrates how even efforts to transcend jurisdictional fragmentation at the regional level can reproduce the exclusion of Indigenous jurisdictions, reinforcing the assumption that legitimate authority over the Amazon resides exclusively with states.

This rights-based and state-centered framing obscures a more fundamental challenge that the Amazon poses to international law in the Anthropocene: the existence of Indigenous jurisdictions that predate, coexist with, and often contest the territorial authority of the modern state.<sup>54</sup> Across the Amazon basin, Indigenous peoples govern land, water, forests, and social relations through normative systems that cannot be reduced to customary practices or cultural expressions. These systems articulate rules concerning access to resources, obligations toward human and non-human beings, mechanisms of conflict resolution, and modes of territorial stewardship that are inseparable from ecological cycles. In this sense, Indigenous governance in the Amazon is not merely local

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<sup>46</sup> BURNS (2014).

<sup>47</sup> GARCÍA VILLAMIL (2021).

<sup>48</sup> MEDINA (2016); MEJÍA-LEMONS (2022).

<sup>49</sup> ZOMBORY (2023); WIESSNER (2011).

<sup>50</sup> NOTINI (2025).

<sup>51</sup> BARELLI (2010).

<sup>52</sup> MERINO (2023).

<sup>53</sup> FUENTES(2025).

<sup>54</sup> BACCA (2018).

administration, but a form of territorial jurisdiction grounded in relational ways of living and ecological interdependence.<sup>55</sup>

While Indigenous legal orders offer a particularly clear illustration of legally meaningful forms of territorial governance in the Amazon, they are not the only sources of normative ordering operating beyond the state. The basin is also inhabited by a wide range of local communities, including riverine populations, *quilombola* peoples,<sup>56</sup> peasant communities<sup>57</sup>, and other groups whose livelihoods depend on long-term relationships with specific ecosystems.<sup>58</sup> These communities develop situated forms of knowledge and normative practices concerning land use, water management, seasonal cycles, and resource extraction that, while not always articulated as formal legal systems, nonetheless structure authority, obligation, and responsibility in practice.<sup>59</sup> Acknowledging these forms of local normativity further exposes the limitations of international law's state-centred approach, which tends to recognize legal authority only where it mirrors institutionalized sovereignty. By bringing these local normative orders into view, the Amazon reveals a broader spectrum of territorial governance arrangements that challenge the assumption that meaningful legal ordering must be centralized, codified, and territorially exclusive.

International law's difficulty in engaging with these jurisdictions is not primarily a problem of implementation or political will. Rather, it reflects a deeper conceptual limitation: the inability of a sovereignty-based legal order to recognize authority over territory that is neither derived from the state nor legible through territorial exclusivity. Indigenous territorial governance in the Amazon challenges the foundational assumption that jurisdiction must be singular, hierarchical, and territorially bounded.<sup>60</sup> Instead, it reveals forms of legal authority that are plural, overlapping, and ecologically embedded, operating across scales that do not align with national borders.<sup>61</sup>

Regional human rights jurisprudence has partially disrupted this logic by recognizing the intrinsic relationship between Indigenous peoples, their territories, and the environment.<sup>62</sup> Decisions linking the right to a healthy environment with Indigenous land rights gesture toward a more integrated understanding of territory as a socio-ecological system rather than a mere spatial unit of state authority.<sup>63</sup> Yet even these advances tend to conceptualize Indigenous jurisdiction indirectly, as an extension of individual or collective rights, rather than as an autonomous source of legal normativity.<sup>64</sup> Consequently, Indigenous legal orders remain dependent on external validation and enforcement, reinforcing their structural vulnerability within state-centric legal frameworks.

By framing Indigenous governance in terms of jurisdiction rather than protection, this section deliberately shifts the analysis from questions of recognition and enforcement to the problem of authority over territory in a legally plural and ecologically interconnected world. The persistence of this asymmetry has profound implications in the context of the Anthropocene.<sup>65</sup> Indigenous territorial

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<sup>55</sup> GALÁRRAGA (2023).

<sup>56</sup> BOYER(2014).

<sup>57</sup> ADAMS (2008); STOIAN & HENKEMANS (2000).

<sup>58</sup> LIRA & CHAVES (2016).

<sup>59</sup> See RIVERA (2024), for more on local expertise in water resources management in the context of the Colombian Caribbean.

<sup>60</sup> BEJARANO (2024).

<sup>61</sup> BEJARANO (2024); BACCA (2018).

<sup>62</sup> FERRER MAC-GREGOR (2022); MÉGRET (2023); ETCHART (2022).

<sup>63</sup> INTER-AMERICAN COMMISSION ON HUMAN RIGHTS (2019).

<sup>64</sup> WATSON (2017).

<sup>65</sup> DOVCHIN, DOVCHIN & GOWER (2024).

governance in the Amazon embodies modes of legal ordering that tend to be attuned to ecological interdependence, long-term environmental stewardship, and the co-constitution of human and non-human life. These characteristics stand in stark contrast to the extractivist and developmental logics often endorsed by sovereign states, even as those same states assert guardianship over the Amazon in international fora. The marginalization of Indigenous jurisdictions thus not only undermines Indigenous self-determination, but also constrains the capacity of international law to respond meaningfully to planetary ecological crises.

Seen from this perspective, the Amazon is not merely a site where Indigenous rights require better protection. It is a planetary legal site that brings into sharp relief the limits of international law's jurisdictional imagination. Indigenous legal pluralism in the Amazon challenges international law to move beyond a framework centered on sovereign authority and to confront the possibility of legally meaningful forms of territorial governance that operate outside, alongside, and sometimes against the state. This challenge extends far beyond the Amazon.<sup>66</sup> As ecological interdependence increasingly destabilizes the spatial and conceptual foundations of modern jurisdiction, the recognition of Indigenous legal orders emerges not as an exception, but as a critical lens through which international law in the Anthropocene must be rethought.

The challenge posed by Indigenous legal pluralism extends beyond the question of who exercises authority over territory.<sup>67</sup> It also opens a deeper inquiry into the sources of legal normativity that inform territorial governance in the Anthropocene. Indigenous legal orders in the Amazon are not only plural in institutional terms; they are grounded in normative relationships with non-human entities, ecological processes, and material conditions that shape legal obligations and responsibilities.<sup>68</sup> The Indigenous relational understanding of normativity exposes the limitations of international law's anthropocentric foundations, which continue to treat nature primarily as an object of regulation rather than as a participant in legal ordering.<sup>69</sup> The last section of this article builds on this insight by examining how the Amazon brings into view the possibility of nature itself functioning as a source of normativity, further unsettling the conceptual architecture of international law in the Anthropocene. Next, I explore possible pathways to re-imagine the pluralist jurisdictional map of the Amazon as a planetary legal site.

## 2.2 Toward Plural and Relational Jurisdiction in the Anthropocene

Rather than treating Indigenous legal pluralism as an issue of accommodation within existing state-centered frameworks, this article explores the possibility of rethinking jurisdiction itself as a relational and ecologically embedded practice.<sup>70</sup> From this perspective, jurisdiction need not be understood exclusively as a singular, territorially bounded authority exercised by the state, but as a set of overlapping and situated claims to govern ecological space. Indigenous legal orders in the Amazon illuminate how authority over territory can be grounded in long-term relationships with land, water, forests, and non-human beings, rather than in exclusive sovereignty.<sup>71</sup> Recognizing these forms of jurisdiction does not require dismantling state authority, but it does require international law to

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<sup>66</sup> See for example PAGE & PELIZZON (2024).

<sup>67</sup> MCVEIGH & PAHUJA (2022).

<sup>68</sup> BACCA (2025); BLACK (2010).

<sup>69</sup> VARGAS RONCANCIO (2024).

<sup>70</sup> FA et al. (2020).

<sup>71</sup> BACCA (2025).

abandon the assumption that legitimate territorial governance must be centralized, hierarchical, and uniform.

Building on this insight, the article examines how international law might conceptualize jurisdictional arrangements that are plural, layered, and adaptive to ecological interdependence and local forms of authority. Such arrangements would allow multiple authorities to coexist within the same ecological space, each exercising governance according to distinct normative logics and at different scales. In the Amazon, this could entail acknowledging Indigenous jurisdictions as legally meaningful sites of territorial governance operating alongside state and international regimes, without being subsumed under them. Importantly, this proposal does not romanticize Indigenous governance nor claim that it offers a universal solution to ecological crises. Rather, it highlights how Indigenous legal orders expose alternative jurisdictional imaginaries that are better aligned with the ecological dynamics of the Anthropocene.

This reorientation also invites a shift from permanent and exclusive jurisdictional claims toward more flexible and context-sensitive forms of authority. Ecological systems such as the Amazon Basin are characterized by seasonal variability, shifting hydrological patterns, and interdependent life cycles that resist static territorial control. Local communities and Indigenous peoples possess relevant expertise about these life cycles that should be taken into account as the basis for decision-making processes.<sup>72</sup> International law could respond to this reality by opening space for transitional or contingent jurisdictional arrangements, in which different authorities coordinate governance over specific ecological functions, timeframes, or areas based on local knowledge. Indigenous institutions, local communities, state agencies, and regional bodies could thus participate in shared or rotating forms of jurisdiction tailored to ecological processes, rather than to fixed political boundaries. Such an approach would allow international law to engage more directly with the material conditions of ecosystems without abandoning its normative structure.

Finally, reframing Indigenous legal pluralism as a jurisdictional challenge has broader implications for international law in the Anthropocene. It suggests that the problem is not merely the insufficient protection of Indigenous rights, but the narrow conception of authority through which international law organizes territorial governance. By taking Indigenous jurisdictions seriously as sources of legal ordering, international law is compelled to confront the possibility that authority over territory can be plural, relational, and ecologically grounded. The Amazon thus functions as a critical site for reimagining jurisdiction beyond the state, offering insights that resonate far beyond the region. In this sense, Indigenous legal pluralism should not be treated as an exception within international law's framework, but as a key entry point for rethinking its jurisdictional foundations in an era of planetary ecological interdependence, in which Indigenous and local communities confront the consequences of ecological processes unfolding at global scales.

### III. SOURCES OF NORMATIVE ORIENTATION IN INTERNATIONAL LAW

#### I.1 The Limits of Anthropocentric Normative Orientation

Beyond questions of jurisdictional fragmentation and the marginalization of Indigenous legal orders, international law in the Anthropocene faces a deeper and more structural tension: the persistence of an anthropocentric understanding of legal normativity in a context where ecological processes and material conditions increasingly shape the parameters of legal decision-making.<sup>73</sup> This tension

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<sup>72</sup> See for example: SERRANO ROJAS et al. (2022); BOHENSKY & MARU (2011).

<sup>73</sup> A fully account of this critique can be found in BURDON & MARTEL (Eds) *The Routledge handbook of international law and anthropocentrism*.

concerns not only who governs ecosystems or at what scale jurisdiction is exercised, but how legal norms are justified, oriented, and constrained in the first place.

Modern international law remains grounded in a conception of normativity as an exclusively human product, generated through democratic decision-making processes, state will, institutional authority, and formal legal sources.<sup>74</sup> Within this framework, nature is typically approached as an object of regulation, protection, or management, rather than as a constitutive element in the production of normative orientation. Ecological systems appear as external facts to be governed, mitigated, or balanced against human interests,<sup>75</sup> but not as conditions that fundamentally shape what counts as legally reasonable, sustainable, or legitimate. This anthropocentric configuration has long structured international environmental law, even as ecological crises increasingly expose its limits.<sup>76</sup>

In this context, ecological processes as sources of *normative orientation* do not refer to the existence of legal norms outside human institutions, nor to the attribution of legal authority or agency to nature itself.<sup>77</sup> Rather, it denotes the ways in which ecological processes and material conditions shape the horizon within which legal reasoning operates, delimiting what can plausibly count as appropriate, effective, or legitimate legal decisions.<sup>78</sup>

Normative orientation points to the background constraints, parameters, and directional cues that inform legal judgment, even when they are not formally articulated as sources of law. In this sense, ecological cycles, thresholds, and interdependencies do not produce legal norms in the conventional sense, but they increasingly function as orienting conditions that structure legal choices by defining limits, risks, and consequences that law cannot and should not coherently ignore.

Current ecological transformations render this tension particularly visible. Human interventions in Earth systems have disrupted ecological cycles that operate across temporal<sup>79</sup> and spatial scales far exceeding those of legal and political institutions.<sup>80</sup> Climate dynamics, hydrological cycles, biodiversity loss, and ecosystem thresholds now condition the feasibility and consequences of legal decisions in ways that cannot be treated as merely external constraints.<sup>81</sup> Legal choices regarding land use, resource extraction, infrastructure, or conservation are increasingly shaped by material ecological limits, irreversible environmental damage, and systemic interdependencies. In this sense, ecological processes do not simply inform law as scientific background knowledge; they should function as sources of ‘normative orientation’ by delineating what legal decisions can plausibly achieve without generating further ecological disruption.

Recognizing this does not require abandoning the human foundations of law or attributing legal agency to nature.<sup>82</sup> Rather, it highlights a growing mismatch between the anthropocentric structure of legal reasoning and the ecological conditions under which law now operates. Ecological processes

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<sup>74</sup> CHAPAUX, MÉGRET & NATAJARAN (2023).

<sup>75</sup> BURDON & MARTEL (2023).

<sup>76</sup> DE LUCIA (2023).

<sup>77</sup> For a more radical account on ecological legality, see DAVIES (2022).

<sup>78</sup> By frasing it as an orientation that does not deny human agency, it is possible to face challenges such as anti-democratic environmental ruling. For a further critique see: MOORE & ROBERTS (2022).

<sup>79</sup> LINDAHL (2021).

<sup>80</sup> BESSANT, PROST & WATTS (2025).

<sup>81</sup> LINDAHL (2025).

<sup>82</sup> DAVIES (2022).

impose constraints, rhythms, and thresholds that shape the normative horizon of legal decision-making, even when they are not formally acknowledged as such. When legal frameworks ignore these dynamics, they risk producing norms that are internally coherent yet ecologically unsustainable, undermining their own effectiveness and legitimacy.

Some scholars have sought to respond to this tension by proposing a more radical reconceptualization of law that explicitly expands its referent beyond human institutions.<sup>83</sup> These approaches underscore the extent to which anthropocentric legal frameworks struggle to account for ecological interdependence and material limits. Without necessarily endorsing such reconceptualization, their contribution lies in revealing a structural pressure on modern legal thought: the difficulty of maintaining a sharp separation between human-made normativity and the ecological systems upon which legal orders depend.<sup>84</sup>

Approaching the Amazon as a planetary legal site helps clarify why this tension cannot be understood as a merely regional or sectoral problem of environmental regulation. The Amazon is deeply embedded in planetary ecological processes, including global climate regulation, atmospheric circulation, and hydrological cycles that extend far beyond the basin itself. Legal decisions taken within and about the Amazon therefore participate in shaping ecological dynamics at multiple scales, from local livelihoods to planetary climate systems. Seen from this perspective, the Amazon exposes how anthropocentric legal reasoning struggles to engage with forms of normative orientation that emerge from ecological interdependencies operating across jurisdictions and temporal horizons. The Amazon thus functions not simply as an object of legal governance, but as a site through which the limits of existing legal frameworks become visible at a planetary scale. In this sense, ecological processes should not simply inform law as scientific background knowledge; they could function as sources of ‘normative orientation’ by delineating what legal decisions can plausibly achieve without generating further ecological disruption.

The Amazon Basin offers a particularly revealing site for observing this tension. As a complex socio-ecological system, the Amazon operates through interconnected cycles of water, soil, vegetation, and climate regulation that transcend national borders and human temporalities. Legal decisions affecting the region—whether related to deforestation, infrastructure development, conservation, or Indigenous land rights—cannot be meaningfully assessed without reference to these ecological dynamics. In practice, the viability of legal norms in the Amazon is already conditioned by ecological thresholds and feedback loops, even when legal reasoning continues to frame such considerations as external or secondary.

Crucially, Indigenous forms of knowledge and governance illuminate alternative ways of engaging with this challenge. Rather than treating nature as a passive object of regulation, many Indigenous legal and normative systems have historically oriented collective decision-making around ecological cycles, spatial interdependencies, and long-term environmental continuity.<sup>85</sup> This does not mean that Indigenous knowledge provides a direct or exhaustive translation of ecological normativity into law. However, legal anthropologists have shown that legal reasoning can be structured in ways that are attentive to ecological processes as constitutive elements of normative judgment, rather than as

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<sup>83</sup> DAVIES (2022).

<sup>84</sup> PETERSMANN et al. (2024).

<sup>85</sup> VARGAS RONCANCIO (2024).

afterthoughts.<sup>86</sup> In this sense, Indigenous legal orders function as mediating practices that render ecological constraints legible within normative frameworks.

This section does not seek to advance a comprehensive theory of ecological normativity or to resolve longstanding questions concerning democratic authority, legitimacy, or constituent power in relation to non-human processes. Instead, it identifies a structural tension within international law: the growing inability of anthropocentric legal reasoning to adequately engage with the ecological conditions that increasingly orient global legal outcomes. As ecological crises intensify, this tension becomes harder to ignore. Legal norms that remain insulated from ecological realities risk deepening the very disruptions they seek to address.

If ecological processes increasingly shape the conditions of possibility for legal decision-making, then Legal frameworks that do not adequately engage with this dynamic increasingly risk a crisis of adequacy. This critique connects with the previous sections, which turned to the jurisdictional implications of ecological normativity and examined the limits of state-centered territorial frameworks to accommodate the spatial and temporal scales at which ecosystems operate. In the following section, the article outlines, in a prepositive and imaginative tone, how this ecological normative orientation could function within existing legal thinking.

## I.2 Ecological Constraints and Normative Orientation

The proposal that follows from this analysis does not seek to replace the formal sources of international law, nor to displace the human foundations of legal normativity. Rather, it advances a more modest but consequential reorientation: to rethink how international law incorporates, processes, and hierarchizes ecological considerations within legal reasoning itself. Recognizing ecological processes as sources of normative orientation means acknowledging that material limits, ecological thresholds, and systemic interdependencies increasingly operate as structural parameters of legal judgment. These elements shape the conditions under which legal norms can plausibly function, even when they are not formally articulated as legal obligations or sources of law.

Such a reorientation entails a shift in how legal reasonableness, proportionality, and legitimacy are assessed. Ecological normative orientation could then acquire the form of legal principles guiding law-making processes. Instead of treating ecological impacts solely as externalities or competing interests to be balanced against predefined human objectives, international legal reasoning could approach them as *ex ante* conditions that delimit the range of normatively viable legal choices. Legal decisions that disregard irreversible ecological dynamics, tipping points, or long-term systemic feedbacks are not merely environmentally unsound; they risk becoming legally deficient insofar as they rest on normative assumptions that are incompatible with the material conditions that sustain their implementation and effectiveness. In this sense, ecological orientation does not prescribe specific legal outcomes, but reshapes the criteria through which outcomes are evaluated.

This approach also opens space for integrating diverse forms of ecological knowledge into legal reasoning without collapsing law into science or attributing legal agency to nature. Ecological orientation operates at the level of justification and constraint, informing how legal norms are interpreted and applied rather than generating autonomous normative commands. Indigenous legal orders and other place-based governance practices illustrate how normative systems can remain

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<sup>86</sup> GARCÍA RUALES & REMACHE (2025); VARGAS RONCANCIO (2024).

human-made while nonetheless being structured around ecological cycles, temporal depth, and relational understandings of territory.<sup>87</sup> Their relevance here lies not in their direct transposability into international law, but in their demonstration that legal reasoning should be oriented by ecological conditions in a systematic manner.

Finally, approaching the Amazon as a planetary legal site underscores the broader implications of this proposal. The Amazon makes visible how ecological processes operating across jurisdictions and temporal scales increasingly condition the feasibility and legitimacy of legal decisions. By treating ecological interdependence as a source of normative orientation rather than as mere background information, international law can begin to address the growing mismatch between its anthropocentric structure and the ecological conditions under which it now operates. This reorientation does not resolve the structural tensions of international law in the Anthropocene, but it clarifies the normative stakes of continuing to ignore them and sets the stage for rethinking jurisdictional frameworks in light of ecological interdependence.

#### IV. CONCLUSION

This article has used the Amazon Basin as a planetary legal site through which to examine structural tensions within international law in the Anthropocene. The analysis approaches the Amazon not as a regional environmental problem nor a bounded object of regulation, but as a site where the limits of modern legal ordering become particularly visible. The basin's ecological interdependence, its transboundary dynamics, and its long-standing forms of Indigenous territorial governance expose frictions between ecological processes and the jurisdictional, epistemic, and normative assumptions that continue to structure international law.

The article identified three interrelated tensions. First, the mismatch between ecological interdependence and jurisdictional fragmentation reveals how territorially bounded and functionally segmented legal frameworks struggle to govern ecosystems that operate across borders, scales, and temporal horizons. Second, the marginalization of Indigenous legal orders and other situated forms of territorial governance highlights the limits of a state-centered conception of jurisdiction in legally plural and ecologically interconnected spaces. Third, the persistence of anthropocentric normative reasoning underscores the difficulty of maintaining a legal order that treats nature primarily as an object of regulation in a context where ecological processes increasingly shape the conditions of legal decision-making.

In response to these tensions, the article advanced three analytically modest proposals. It explored the possibility of approaching jurisdiction as relational and ecologically situated, rather than exclusively territorially fixed; of embracing epistemic pluralism as a condition for legal reasoning in the Anthropocene, rather than as a matter of participation or consultation; and of understanding ecological processes as sources of normative orientation that inform and constrain legal judgment without displacing the human foundations of law. These proposals are not intended to resolve the structural challenges facing international law, but to reorient legal reasoning toward greater ecological attentiveness within existing normative and institutional constraints.

Seen from this perspective, the Amazon does not function as an exceptional case, but as a condensed expression of broader planetary dynamics that increasingly confront international law. The tensions made visible through the Amazon resonate across other critical ecosystems and socio-ecological

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<sup>87</sup> As shown by RIVERA (2024).

systems in the Anthropocene, suggesting that the challenges identified here are not geographically confined but structurally embedded in contemporary legal ordering.

Taking these tensions seriously does not require abandoning international law's commitment to human agency, democratic decision-making, or legal certainty. It does, however, require rethinking how legal authority, knowledge, and normativity are articulated in relation to ecological processes that exceed territorial borders and human temporalities. By approaching the Amazon as a planetary legal site, this article has sought to clarify the stakes of that rethinking and to open space for further work on how international law might remain normatively coherent, institutionally viable, and ecologically responsive in an era of planetary interdependence.

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