Metanarratives of International Environmental Law and Science in the Anthropocene Era: the ontological and epistemological incompatibility

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1. INTRODUCTION

The regime of International Environmental Law (IEL) is illegitimate.² We assume this premise by observing the birth of IEL as a mutation of the traditional International Law to deal with the raising concerns with transboundary environmental issues.³

Although IEL developed new legal concepts to regulate transboundary environment phenomena, such as soft law, and umbrella treaties, and its proximity with natural sciences, it remains a stance of the Eurocentric international legal system, thus, coping with the failure of the modernity's project of endless happiness thru reason and development.

In this sense, metanarratives or totalizing mega-discourses sustain the international legal order, providing the basis for action/judgment in all situations, disregarding stances in both the social and natural worlds (Lyotard, Jameson, and Massumi 1984). Also, the existing metanarratives in International Law are performative

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² This is a paraphrase of the quotation "The regime of International Law is illegitimate" In Mutua, Makau, and Antony Anghie. 2000. "What Is TWAIL?" *Proceedings of the Annual Meeting (American Society of International Law)* 94: 31–40.

³ International lawyers tend to agree that the historical markers of the IEL are the United Nations Conference on the Human Environment (Stockholm, 1972) and the United Nations Conference on Environment and Development (Rio, 1992).

utterances, which are part of discourses directed to specific actions and purposes, which in this case, the universality narrative presents the argument of the inexistence of temporal or physical constraints in the social construction of meanings in the world, thus, the exclusion of alternative world views is legally justified (Austin 2018; Bedjaoui 1979). The same applies to the narrative presenting science as the superior form of acquiring knowledge, which excludes traditional or indigenous knowledge.

Therefore, the so-called new legal concepts that emerge with IEL are part of an updating process of the metanarratives of International Law in order to survive in the passage from the Holocene to the Anthropocene paradigm, in which “[...] humans are now a major geological and environmental force, as important as, or more important than, natural forces.” (Corlett 2015, p.36). Within this new paradigm, nature cannot be a mere object in which human beings observe to understand and dominate within the boundaries of the social, but their experiences in developing and sustaining order in the natural world produce existential threats (Vidas et al. 2015; Thomas 1996; Foster 1999).⁴

The increasing natural extreme events happening all over the world are becoming sources of great concern among humankind, which “[...] in recent years there has been a growing concern over thresholds or tipping points in nature” (Brown 2009, p.18). Unfortunately, the same concern cannot be observed in the international political arena, which lately has striven to address the environmental challenges (Bernardin, Chiuso, and Lesage 2015; Gonzalez 2017; Alam et al. 2016).

⁴ Chakrabarty (2018) suggests that the concept of anthropocene has been introduced for the first time by the Soviet geochemist Vladimir Vernadsky in the book *The Biosphere* but gained traction in 2000 with Paul Crutzen and Eugene Stoermer published in the newsletter of the Geosphere-Biosphere Programme. See <http://www.igbp.net/globalchange/anthropocene.4.1b8ae20512db692f2a680009238.html>. Last access: Sept 10, 2019.

Considering the arguments presented, by no means, we are saying that IEL is not a relevant area of study. As stated by Kotzé (2014, p.144), a nihilist approach towards IEL serves no one; however, a new way or approach of regulating the interactions between human and natural realms is imperious:

The new globalized reality of the Anthropocene entails that environmental lawyers will have to revisit these orthodox, and often archaic, social constructs that have been designed as institutional responses to less complicated or complex regulatory issues that existed during the Holocene epoch, which in turn might require a wholesale review of current regulatory interventions leading to proposals to reconceptualise and redesign our law and governance constructs.

Within that in mind, we ask: are science, nature, reason, and International Law deterministic ontologies and epistemologies that resist time and history? Are we justified to think that the natural world is distinct from the construction of social interactions, especially the ones built on the premise of the endless expansion of capitalism?

Our hypothesis is that there is an incompatibility between the tenets of International Law/Modern Science (universalism and rationality) in the Anthropocene as the impacts over the environment are mostly local, while, the proposed solutions and regulations are in the international dimension, thus, far from other worldviews and perceptions on how to act towards the environment. Therefore, the role of Transnational Environmental Law (diffusion of ideas that make sense on diverse social and natural environments) and tradition (local epistemological stance embedded with values, culture, ideas, and norms) are essential to present a viable option to deal with the environmental challenges the world faces. Both present the primary tenets of the human existence in terms of the social construction of societies: the dimension historical-cultural of the humankind (Benoist, 2015).

The hypothesis is tested in the biodiversity international regime, which is the representative case for the relation of International Law/Science and to be analyzed in this study, is subject to the process of reification, which for Horkheimer and Adorno (200, p.45) “all reification is a forgetting,” a normalizing state of things that discharges the need of further relationship between the object and subject, thus, making the first fixed in time and space (Honneth, 2012). Also, the drivers for biodiversity loss are connected to social variables at local and regional levels, such as poverty, gender inequality, and systemic corruption (GEO6, 2019).

Considering that our primary goal is to challenge the metanarratives of IEL in the biodiversity case, the methodological strategy consists of applying the model of critical analysis of discourses (Fairclough 2013; Bhaskar 2010). The model seeks to identify (1) the social problem with a semiotics aspect; (2) the obstacles to address the problem; (3) the social order in which the problem emerges - the network of social practices; (4) forms to overcome the problem; and (5) implications upon a critical reflection over the previous steps.

2. SOCIAL AND NATURAL REALMS – the construction of the social meaning of the biodiversity

There is enough evidence that sustains the claim that the changes in the environment are an existential threat to humankind. A representative instance of this argument is the recent Global Environment Outlook (2019), which state that the biodiversity

[...] is in crisis. There is well-established evidence indicating an irrevocable and continuing decline of genetic and species diversity and degradation of ecosystems at local and global scales. Scientists are increasingly concerned that, if anthropogenic pressures on Biodiversity continue unabated, we risk precipitating a sixth mass extinction event in Earth history, with profound impacts on human health and equity. (UNEP 2019, p. 142).

Although an existential threat (it extended to climate change and freshwater, for instance), the lack of active international institutions to deal with the problem is disconcerting and worrisome. As such, in this part of the paper, we will address this problem guided by the proposed hypothesis and methodology.

2.1. Reification and metanarratives of biodiversity

The world is a place of objects and a forum for actions according to the Jungian psychology tradition. The scientific realm seeks to isolate the subjectivity embedded in the actions in relation to the object of inquiry, which for the object, the empirical manifestations of its qualities produce validation, while, for the action, the sensorial apprehension is in the world of the spirit in which the moral meaning is not verifiable or falsified.

The perception of the world was different before Descartes and Bacon, who gave birth to the scientific experimental phase of the inquires. However, before the experimental phase, many societies flourish and functioning according to the rules and traditions of their epoch but embedded with dense content and dynamism. It was a world in which natural phenomena were explained in terms of myths and meanings according to tradition (Ricoeur, 2006). As stated by Horkheimer and Adorno (2007, p.3): “On their way toward modern science human beings have discarded meaning. The concept is replaced by the formula, the cause by rules and probability.” Is it possible that humankind has lost the ability to recognize that tradition might be right by entering the scientific paradigm? ⁵

⁵ Regarding the tradition and meanings in interpreting the world, Peterson (Peterson, 1999, p.8) poses disconcerting questions: “Is it not more likely that we just do not know how it could be that traditional notions are *right*, given their *appearance* of extreme irrationality? Is it not likely that this indicates modern philosophical ignorance, rather than ancestral philosophical error?”

As stated by Escobar (1998, p.55), “[...] the act of naming a new reality is never innocent.” In this sense, International Law and modern science are Western institutions that interpret the world. The ontological premise of International Law is the construction of a homogeneous and civilized moral grammar based on a European sense of the universality of law, and sciences produce the metanarrative of rationality, which is the epistemological stance towards the truth, therefore, excluding other epistemologies (Teixeira, 2011). As social constructs, both are intended to establish order, which “[...] are ethically flexible: what some perceive as a bad order can persuasively narrate as good order, and vice versa.” (Cupac, 2019, p.2).

The epistemology of science helps to understand the nature of the object itself, while International Law establishes rules on how the object should be. In this sense, Natarajan and Dehm (2019) present this dissociation:

Notwithstanding the notions of stewardship that gave rise to international environmental law, the environment is more than the object of our protection. It is the foundation of all human life and endeavor, including, among other things, the basis for all economic activity. International law characterizes the latter aspect as natural resources, which are the objects not of protection but of free commerce.

As such, the reification of nature as a feature for both IEL and Science presents a severe challenge as humanity enters the Anthropocene period of the earth, in which human activity becomes the primary driver for environmental changes (Schwägerl and Crutzen 2018; Chakrabarty 2018). In this sense, the Anthropocene “[...] emphasizes the acceleration of the degradation of the biosphere in recent decades and concludes that humanity has already abandoned the previous period of stability.” (Franchini et al. 2017, p.180)

The international community started in the 1970s to deal with the adverse effects of human activities and to address the potential international regulation of the environment (Stockholm 1972 is considered the historical marker for IEL).

In regards to the biodiversity dimension, the backbone of the international regime from its inception is the Global Biodiversity Strategy (WRI/IUCN/UNEP 1992) and the Convention on Biological Diversity (CBD). According to Santos (2009), the regulation of the environment is one of the pillars of modernity, which challenges the regulation of an earlier concern of countries: the economic dimension.⁶ The pillar of regulation of the biodiversity gears towards assessing the significance of the biodiversity loss to the proper functioning of the ecosystems and making sure that regulation addresses the relation between biodiversity and the “services” that the ecosystems provide (Laird 2002; Argyrou 2005).⁷

The legal and natural dimensions of modernity converge to metanarratives that Bernard (2011) refers to “The Game of the Just and the Game of the True.” Metanarratives are more extensive explanations of the reality, which defines the world views or at least part of it (Lyotard, 2004). Thus, metanarratives of International Law as a body of rules conducent to ultimate justice and fairness and science as the only epistemological stance of real knowledge, thus, capable of emancipating the man from archaic traditions (in IEL, the incorporation of the scientific knowledge is an essential premise).

Thus, modern metanarratives are forms of legitimation of normativity and knowledge through performativity (Austin 2018). In this sense, the intentional language of the International Law in regulating biodiversity is instrumental (Koskenniemi 2006).

⁶ As posed by Natarajan and Dehm (2019): “The very origins of international law lie in doctrines put forward to allow private actors from the North to exploit natural resources in the South, whether in the arguments of Vitoria for free commerce in the Americas or Grotius’ defense of the liberties of the Dutch East India Company in its untrammled pursuit of exploiting colonial labor and resources.”

⁷ This is the approach adopted by several governmental and non-governmental organization. As a representative evidence: “Valuation and accounting of island ecosystem services is fundamental to our ability to achieve sustainable green growth” in <http://wedocs.unep.org/handle/20.500.11822/9341>. Last access: Oct 15, 2019.

In this vein, Mutua and Anghie (2000, p.31): “Neither universality nor its promise of global order and stability makes international law a just, equitable, and legitimate code of global governance for the Third World.”

As stated by Escobar (1998, p.56), the biodiversity discourse:

[...] has thus resulted in an increasingly vast institutional apparatus that systematically organizes the production of forms of knowledge and types of power, linking one to the other through concrete strategies and programs. International institutions, Northern NGOs, botanical gardens, universities and research institutes in the first and third worlds, pharmaceutical companies, and the great variety of experts located in each of these sites occupy dominant sites in the network.

Therefore, we observe that the biodiversity is construed intentionally and instrumentally by international institutions to secure the expansion of capitalism, which nowadays has become itself a metanarrative in the economic domain, or in other words, the only economic system viable to fulfill the dream of development (Stråth and Koskenniemi 2015). However, how to conciliate a never-ending economic system that operates under the premise of expansion with the finitude of the natural world? As stated by Stark (2002, p. 150):

The metanarrative of economic development describes a similarly desperate situation, but it has a very different focus. It is a story of growing economic polarization, in which the poorest fifth of the world's population subsists on less than five percent world's resources, while the top five percent consume twenty-five percent of these resources.

2.2. Economic versus natural dimensions of biodiversity

There is a failure at the international level to conciliate the colliding interests of taking care of biodiversity and the economic demands according to the liberal model that is embedded in international institutions (Pahuja 2011).

The relation between trade and environment has received little attention until 1991 when it came to public the General Agreement on Tariffs and Trade (GATT) Tuna-Dolphin Disputes (I and II), which placed in evidence the opposing positions between

traders and environmentalists, especially the arguments in favor of environmental protection, development, and trade (Schoenbaum 1997).⁸ As posed by Rosendal (2001, p. 95), in recent decades we have been observing a proliferation of environmental treaties, which “[...] have been negotiated without explicit measures to resolve the frequently conflicting goals of overlapping economic regimes.” That is true, for instance, by comparing the Convention on Biological Diversity and the Agreement Trade-Related Aspects of Intellectual Property Rights (TRIPS), as the first possess a voluntary, vague, and aspirational language while the second is mandatory and enforceable by the World Trade Organization, and World Intellectual Property Organization.

Whether at national, regional, or international levels, the conciliation of conflicting interests rests on the governance stance, which is the dislocation of the contradiction from the economic realm to the political one. Although the movement is not natural, it is expected from governments and/or international institutions as part of their mission to conciliate in the public arena the contentions. That is what Doeleman (1997, p. 105) refers to government failure, as the “[...] dominant theme of the environmental literature concerns the incidence of market failure as evidenced in unwanted levels of pollution, urban congestion, land degradation, resource depletion, or loss of wilderness and wildlife.”

The international community perceives the failure to address the environmental challenges rather than an issue of existential threat but a matter of environmental externalities that need to be addressed by the sustainable development principle. As stated earlier, the emergence of the concept of sustainable development is the survival strategy of the metanarrative of development. For that matter, there is an observable imbalance in

⁸ For an inventory of the arguments for both sides in the academia, see: <https://www.ictsd.org/gatts-tuna-dolphin-case>. Last access: Nov 5, 2019.

international institutions, which nowadays is a reflex of the political shift towards the ultraliberal and nationalist projects in many countries worldwide that places economic demands upfront environmental protection, and a proliferation of green economy or green growth that promises to resolve environmental problems, which presents no empirical evidence of the veracity of the claim (Bieber 2018; Barsalou and Picard 2018; Hickel and Kallis 2019).

The phenomena are not restricted to political circles, as in academia we are still grasping for improving our understanding of the ontologies and epistemologies of the fields. For instance, see the lack of the debate on what Dehm (2016, p. 136) calls “survival emissions” from emerging countries and “luxury emissions” from rich countries, thus, confirming the need for a more critical approach in dealing with such hot and contradictory issues.

2.3. International institutions as reproducers of colonial violence

The background condition for exploring our hypothesis is imperialism. As stated by Young (2016, p. 16):

The term 'empire' has been widely used for many centuries without, however, necessarily signifying 'imperialism'. Here a basic difference emerges between an empire that was bureaucratically controlled by a government from the centre, and which was developed for ideological as well as financial reasons, a structure that can be called imperialism, and an empire that was developed for settlement by individual communities or for commercial purposes by a trading company, a structure that can be called colonial

As such, the concept of imperialism is grounded on the exercise of power “[...] either through direct conquest or (latterly) through political and economic influence that effectively amounts to a similar form of domination: both involve the practice of power through facilitating institutions and ideologies” (Young 2016, p. 27).

The critical point in this discussion involves performing actions towards spreading institutions and ideologies that propagate social and political structures as a form of domination and discrimination for imperial purposes; thus, a sort of violence itself.

As such, Žižek (2008) calls symbolic the hidden aspects of violence, in which ontology presents the subjective and objective dimensions. The subjective dimension of violence is the one that brings undesired perturbation to the normal functioning of the state-of-affairs or *status quo* of the institutions. The objective violence is the one imposed unilaterally to define and set the parameters of the ordinary or smooth functioning of the institutions, which manifest itself in a specific form of language and actions towards domination or imposing a predefined universal meaning.

Going further into the analysis of the forms that violence might assume, it is reasonable to say that the possession of the material conditions is only one spectrum of the goal to make international institutions to operate in the normal mode. There is the additional need to build this by propagating a universal set of meanings so powerful that it becomes an ideology, thus, shaping the social reality and world views within the boundaries of the dominant group (Eagleton, 2007).

Therefore, contesting the model presented by institutions or presenting an alternative view of the reality is a perturbation of what is considered reasonable by the international community or by the countries that consider themselves the rightful representatives of universal moral values. This is what Chimni (2006, p.15) refers to:

There is the old idea, which has withstood the passage of time, that dominant social forces in society maintain their domination not through the use of force but through having their worldview accepted as natural by those over whom domination is exercised. Force is only used when absolutely necessary, either to subdue a challenge or to demoralize those social forces aspiring to question the "natural" order of things.⁹

To point out the real violence embedded in international institutions, TWAIL helps to deconstruct the tenets of International Law, not to destroy it, but to unfold its essence in order to discover real intentions in the construction of the world legal order and present an alternative based on values and social aspects of non-European countries.

In the early days of International Law, the colonial confrontation was not between two sovereign states, but between one sovereign European state and one non-European state that, according to the positivist jurisprudence of the time, was lacking in sovereignty. Such a confrontation poses no conceptual difficulties for the positivist jurist who resolves the issue by arguing that the sovereign state can do as it wishes concerning the non-

⁹ See also Mattei (2013).

sovereign entity, which lacks the legal personality to assert any legal opposition (Anghie 1999, p.3).

Since then, imperial domination has become subtle in the construction of the world's legal order after the II World War. For the Great Powers that emerged winners from the World War, the need to build a new international order to restore peace, security and cooperation was premised in (1) the recognition that non-European powers possess the right to self-determination, which was a direct repudiation to colonization; and (2) states were to be governed by human rights. As a direct result, the hegemony of the world affairs was transferred from Europe to the emerging powers that allotted permanent seats in the UN Security Council (Anghie 1999).

In the economic sector of world affairs, the Third World countries were targeted by the Bretton Woods institutions and the rapid expansion of transnational corporations. Therefore, the old forms of advancing towards new territories and resources were substituted by the International Institutions and Law (Koskenniemi 2018).

Therefore, for the maintenance of hegemony of the institutional in the international arena, it is necessary to consider any deviance from the universality of International Law or from reason an attack on the modernity project, thus, should be rejected. It is to say that local resistance and specificities are not compatible with the universal project, thus, instrumental to undermine the resistance and accommodate the need for a development project based on values and principles exogenous to local communities, so they might reach the modernity era by abandoning traditional and outdated practices and values. There was no place for such competing world views in modernity.

Along with Hicks (2019), we understand that a nihilistic approach to International Environmental Law as posed today, even though embedded with imperialistic rationale, serves no one. It is a responsibility of postmodernists not just deconstruct the social institutions but identify what is good and what needs to be changed in order to regulate the social interaction with nature but also ensure the emancipation of the human being before itself and nature.

For that reason, considering that IEL needs to evolve to a more effective regulation, which in the case of biodiversity dislocates from international to local/regional, as we will argue in the next part of the paper.

2.4. Transnational environmental law as the alternative

The anthropogenic pressures over the environment lead the international community to react by transferring to the international forum the largest part of debates and agency to protect the nature. It was a reaction seemingly rational due to the growing use of the sovereignty's shield to justify the indiscriminate use of natural resources within their territories (waves of nationalism of left, right and whatever in between were responsible for that and are nowadays).

However, the remedy applied to the illness has the potential to kill the patient. The adjudication to international institutions to regulate and protect the nature produced metanarratives that transformed nature as one “thing” formed by biodiversity, climate change, and so forth, thus, disregarding the enormous diversity.

Considering the both extremes of regulation, it has become common sense that most of it is not working as we observe in the world an increasingly number of diverse natural events that are tormenting the humankind. As stated earlier in this paper, a critical stance to face the problem needs the deconstruction to understand what is working and what is not, but most important is to present alternatives. As such, if the growing legal body of IEL is not being responsive to the crisis, what is the alternative?

Drawing from the first debates in the 1950's, the formation of transnational legal orders that might account for the regional problems, peculiarities and actors is essential to deal with the growing environmental issues in the Anthropocene (Andrade 2017). As well stated by Natarajan and Dehm (2019), we have to switch from a predominantly command-control ontology, which is proper of international institutions to an interconnection approach in which ideas, culture, tradition, and many other values excluded from IEL are brought to the table to contribute. This is what Franchini et al.

(2017, p.179) have in mind as suggesting that: “[...] most of the actors of the international system operate in a conservative way, pursuing only sovereign and short-term selfish interests, when the logic of the governance of the Anthropocene requires commitments to the universal good and the long term.”

The environmental challenges posed to the international community requires a new approach that ‘breaks the frames’ of IEL and local law, in which boundaries for regulation and legal theory formation are expanded to include contemporary environmental issues under a critical stance that goes beyond the ‘in’ and ‘out’ of the nation-state in terms of law to incorporate to the principle of sovereignty aspects of the nature and participation of constituencies and communities, accountability and legitimacy in deciding the pathways of regulating the environment according to local and regional experiences (Zumbansen 2011).

As such, transnational environmental law is not the mere incorporation to the traditional IEL of the private or economic international dimensions as suggests Andrade (2017), as the responsibility of the transnational corporations, as well as their private business regulation or the more general terms of the contemporary *Lex Mercatoria* is already incorporated into the ontology of IEL.¹⁰

Therefore, it is not a mere ontological and epistemological transformation of IEL, as occurred with the traditional International Law to deal with the environmental issues or in other words a discrete disciplinary specialization, but a reconfiguration of the relations between nature and law that take into account local expectations and world

¹⁰ Such as the Forest Stewardship Council, Roundtable on Sustainable Biofuels, and International Standards Organization, just to mention a few.

views that do not conform with the modernity's project based on Western values (Sloterdijk 1988).

Natarajan and Dehm (2019) provide an inventory of entities/initiatives that are challenging and stretching the both International and domestic law's tenets: (1) the peasant movements in Ecuador (*La Via Campesina*); (2) the ruling by the Supreme Court in Philippines granting to future generations the right to the way of life for future generations;¹¹ (3) the Phulbari strike in India, which mobilized tribal communities against extractivist industry;¹² (4) the law reform in Bolivia to assert the rights of Mother Earth;¹³ and (4) the massive environment protests in China, which were unthinkable a couple of decades ago.¹⁴ In addition to this inventory, for the purposes of our study, it is necessary to incorporate the Catholic Church, already an important agent in International Relations, that assumes central role in the debate as states the words of Pope Francis in the preparatory documents for the Special Assembly of the Synod of Bishops for the Pan-Amazon Region:

Already in the biblical stories of creation it emerges that human existence is grounded in "three fundamental and closely intertwined relationships: with God, with our neighbor, and with the earth itself. [...] These three vital relationships have been broken, both outwardly and within us. This rupture is sin".¹⁵

This inventory helps us out to perceive the myriad of transformative approaches that are located within the scope of the Transnational Environmental Law, thus, helping to provide the necessary theoretical e empirical coverage to explain and understand the current environmental events not covered by the fields of International Law and

¹¹ Available at: https://www.lawphil.net/judjuris/juri1993/jul1993/gr_101083_1993.html.

¹² Available at: <https://globalclimatestrike.net/faces-from-the-phulbari-and-why-we-strike/>.

¹³ Available at: <https://bolivia.infoleyes.com/norma/2689/ley-de-derechos-de-la-madre-tierra-071>.

¹⁴ Available at: <https://lithub.com/can-environmental-activism-succeed-in-china/>.

¹⁵ Available at: <http://www.sinodoamazonico.va/content/sinodoamazonico/en/documents/preparatory-document-for-the-synod-for-the-amazon.html>.

Relations.¹⁶ It presents what Estupinã-Silva (2016) refers to “State ways of fighting”, which means the existence of State apparatus in which civil society might use to resist to assaults against the local and regional environment. In addition, she presents the ‘transnationalization of ways of fighting’, which connects the local ‘State ways of fighting’ in a robust network of agents, ideas, cultures, and world visions, all with important implications on the limits of regulating nature.

The application of these premises to biodiversity provides further understanding and explanation to the transnational approach of the Anthropocene as the possible response considering the apathy and shady features of the international institutions.

The biodiversity conceptualization is formed by its rational and discursive dimensions. As stated by Escobar (1998), the biodiversity discursive dimensions have:

[...] thus, resulted in an increasingly vast institutional apparatus that systematically organizes the production of forms of knowledge and types of power, linking one to the other through concrete strategies and programs. International institutions, Northern NGOs, botanical gardens, universities and research institutes in the first and third worlds, pharmaceutical companies, and the great variety of experts located in each of these sites occupy dominant sites in the network.

The competitive interests over biological goods has directed the regulation, both international and local to the management model, which looks to it as a resource, which implies to other subsets of discourses that include conservation under the natural sciences auspices, sustainable development, and the sharing of benefits thru intellectual property rights. In this vein, ‘[...] critics are adamantly opposed to both biotechnology as a tool to maintain diversity and to the adoption of intellectual property rights as the mechanism for the protection of local knowledge and resources. Instead they advocate for forms of

¹⁶ See also the feminist dimension in Castro, Douglas. 2019. “Climate Justice: Building Opportunities for Women’s Participation and Leadership in the Climate Change Regime.” 2019. <https://www.emerald.com/insight/content/doi/10.1108/S2058-880120190000008010/full/html>.

collective rights that recognize the intrinsic value and the shared character of knowledge and resources (Escobar, 1998 p. 60).¹⁷

Such view is sustained by a cultural autonomy that is proper for local/regional communities, which organize themselves around the collective interest funneled thru the social movements that presents the demands (input) to political system, which renders the decisions (output).¹⁸ In this sense, new and innovative laws; a growing number of court decisions that we observe the phenomena of cross-fertilization, which borrows concepts and principles from other fields of International Law or domestic law;¹⁹ lawsuits against governments based on failure to comply with legal obligations towards a healthy environment;²⁰ and so forth, all examples of the operationalization of the transnational environmental law, which is not nihilist over IEL, domestic or any other regulatory dimension, but a stance that looks to local/regional spaces in their idiosyncrasies to find better ways to regulate without excluding.

A discursive analysis of the GEO6 (2019) made using the computer-assisted qualitative data analysis software (CADQAS) called *ATLAS.ti*, shows important implications for our study, as empirical evidence point out to acknowledgement of the

¹⁷ Although ontologically connected to the traditional IEL, the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement) provides a fresh look into the matter: Visionary and unprecedented, it is an agreement reached by and for Latin America and the Caribbean, reflecting the ambition, priorities and particularities of our region. It addresses key aspects of environmental management and protection from a regional perspective, regulating access rights to information, public participation and justice in matters as important as the sustainable use of natural resources, biodiversity conservation, the fight against land degradation and climate change, and building resilience to disasters. It also includes the world's first binding provision on human rights defenders in environmental matters in a region where sadly they are all too often subject to attacks and intimidation. Available at: <https://www.cepal.org/en/escazuagreement>.

¹⁸ This is the Political System Model from **A systems analysis of political life**, David Easton, New York (1965).

¹⁹ 'As Philippe Sands suggests, 'cross-fertilisation' is a means to meet the challenges posed to international law "as ever more judicial and quasi-judicial bodies are faced with an increasing caseload requiring international law to be interpreted and applied in its general context' (Linderfalk 2015, p.429)

²⁰ See for instance, the caseload on bioiversity. Available at: <http://climatecasechart.com/non-us-case-category/protecting-biodiveristy-and-ecosystems/>.

complicated relationship between the biodiversity in the Anthropocene, but at the same time, provides the solutions we have been presenting in this study referring to the transnational dimension (the quotes in the network below are impressive of this trend).

Figure 1: GEO6 (2019) Network - biodiversity – made by the Author using ATLAS.ti

3. FINDINGS

The review of literature and data collected allows us to present the findings as summarized below. It presents a new perspective to Transnational Environmental Law, allowing it to increase in ontological and epistemological independence from IEL, which as stated before, it possesses virtues, however, due to its proximity to traditional International Law, it becomes more of the same with new features (soft law, and umbrella treaties for instance).

Transnational Environmental Law in the Anthropocene is the reponse to the shortcomings of modernity at the same time is a response to post-modernists that are eager to deconstruct or the sake of deconstruction but offer no option to the demolished institution.

Critical Analysis of Discourse (Fairclough 2013)		
Research Tecnique Steps	Empirical Evidence	Implication(s)
Social problem with a semiotics aspect	Reification and metanarratives of biodiversity at international and domestic law	-Exclusion of local/regional realities/perceptions about biodiversity -Cultural exclusion -Manipulation of discursive stances to legitimize to use biological agents
Obstacles to address the problem	-International institutions with strong economic clivage -Local elites	-Normalizing and standard discourses of development
Social order in which the problem emerges	-Imperial practices -Ontological dissociation between social and natural orders	-Developers X Non-developers (us against them) -Exclusion of social movements
Forms to overcome the problem	-Local practices towards biodiversity -Transnational Environmental Law	-Litigation using various stances of the law - Innovative legislation -Networks to connect agents

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