Proofs Marie Angèle Hermitte

Announce part 4 (written by Emilie and David)

Article

(corr. By D. Forman)

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PART 4. PROSPECTIVE LEGAL ACTIONS ON BEHALF OF FUTURE GENERATIONS?

In the fourth Part of this book, we explore convergent and prospective paths of legal actions on behalf of Future Generations.

Mrs. Marie-Angèle Hermitte examines the need to refocus legal categories as a vehicle for better recognizing and protecting the co-evolving relationship between humans and nature. Hermitte summarizes failures associated with regulation of common resource exploitation, including initial as well as modern attempts to address climate change. Some limited progress has been made by courageous "climate-aware" judges who have begun to shake the balance of powers by applying three forms of legal animism that give concerned citizens a greater role, including indigenist, spiritual and scientific inspirations (essay #11 on "Each Object has its own Subject! The Legal Revolutions of the Human-Nature Relationship")

Sir Matthias Petel studies the potential impact of recognizing the rights of Nature on the judicial protection of ecosystems. He first retraces the genealogy of our relationship with Nature in the Western world and the shift provoked by granting legal personhood to Nature: from anthropocentric ethics to ecocentrism, from neoclassical to ecological economics, and from appropriation to subjectivization within our legal orders. Secondly, Petel attempts to determine the extent to which the rights of nature can facilitate access to justice for environmental issues. He answers the common objections raised by opponents of this proposal, and analyzes examples where this revolution has become a reality including the concrete effects of such recognition. Finally, Petel argues that upon entering the Anthropocene, contrasting humankind and Nature no longer makes sense – as our survival depends on the protection of the biosphere. Rather, he claims that the current struggles pit vulnerable human communities against profit-driven logics of corporations and/or States, in a manner that is detrimental to social and environmental objectives. Therefore, he believes that the effectiveness of the rights of Nature will depend on the political

or cultural practices of the human communities fighting for their land's protection. In that sense, beyond the anthropocentrism vs. ecocentrism debate, human rights and nature rights complement each other in the pursuit of ecological justice, defined as the respect the ecological limits imposed by Nature while ensuring the well-being and the fundamental rights of all human beings (essay #12 on "The Rights of Nature: A Legal Revolution for Ecological Justice").

Attorney Juan Ignacio Pereyra begins his essay by noting the serious transgenerational harm caused by certain technological advances. He praises the positive influence of international law on Argentina's adoption of constitutional provisions and national legislation that respect the rights of future generations. Pereyra then surveys judicial decisions interpreting this major step forward under Argentinian law, but concludes that further development is necessary in the form of regulations that provide specific objective standards to be developed by specialized bodies charged with safeguarding the indispensable rights of future generations (essay #13 on "The Recognition of Rights for Future Generations in Argentinian Lawsuits: Review and Prospects").

David M. Forman identifies links between Native Hawaiian cultural values and the intergenerational equity concepts introduced at the beginning of this book by Professors Delmas-Marty, Brown Weiss and Robinson. Forman then describes a missed opportunity to apply relevant provisions of the Hawai'i constitution in support of local government efforts to fill gaps in both federal and state regulation of pesticide use, in addition to other impacts associated with more than fifty years of open-air field tests in Hawai'i involving genetically engineered seed crops (essay #14 entitled "Marooned in the Doldrums While Ignoring Indigenous Ecological Knowledge: Attempting to Regulate Pesticide Use in Hawai'i").

Professor Michel Prieur describes an effort to build upon two international covenants – concerning Civil and Political Rights (ICCPR), as well as Economic, Social and Cultural Rights (ICESCR) – with a third covenant that reinforces rights relating to the environment by closely linking them to human rights. This draft third covenant: sets forth justiciable rights and obligations exercised with equity, solidarity between generations, without discrimination and in the framework of environmentally sustainable develop; mandates international cooperation; and, provides for effective implementation through specific monitoring measures as well as enforcement through existing procedures administered by the ICESCR under its Optional Protocol (essay #15 on "The Project of an International Covenant on the Human Right to the Environment").

Attorney Corinne Lepage & Professor Emilie Gaillard address the same dynamic renewal of contemporary legal humanism in their essay concerning efforts to draft a Universal Declaration on the Rights and Duties of Humankind. Perhaps even

more daring than the third covenant on a human right to the environment, this initiative seeks to extend the rights of humanity to future generations (essay #16 on "Towards the Recognition of a Universal Declaration of the Rights and Duties of Humankind").

Marie Angèle HERMITTE

11. Each Object Has its Own Subject! The Legal Revolutions of the Human-Nature Relationship

Aware of the widening gap between Global warning alerts and the legal apparatus meant to deal with them, jurists are looking for new principles such as the non-regression principle, and new norm hierarchies such as the inclusion of climate and biodiversity issues in national constitutions. Each step is important. In spite of a variety of principles, rules and international conventions, our Earth system is entangled in a downward spiral. Would we be better off if we were to redesign "objects of law" and "subjects of law"? This would involve a drastic reconstruction of the legal ontology, which inspires all operations of law. We don't know for sure, but maybe these two complementary tracks deserve to be followed simultaneously. In this paper, I intend to focus exclusively on the ontological perspective. Indeed, constituents, lawmakers, judges and plaintiffs tend to redesign legal categories in order to grasp global issues (see Section I below). We will further examine in which circumstances some legal systems have come to posit that natural entities are subjects of law, in order to evidence how different objects call for different subjects (see Section II below).

This essay raised difficult translation questions because the French and English categories are not identical. Francophones use the words "nature juridique", "ontologie juridique", to refer to law in general, while the word "legal", in French, refers to legislative act; English most often do not make any difference between the two. I will use the most common in English, "legal nature". On the other hand, I will make a *verbatim* translation for the concepts of "sujet de droit" and "objet de droit", designated as "subject of law" and "object of law". This allows me to highlight this first logical level, very abstract. At a second level, there are two sub-categories, natural persons and legal persons. Natural entities must constitute a third sub-category, independent of the first two.

² Y. Thomas, Les opérations du droit [Legal Operations], Le Seuil, 2011.

Given the limited length of this essay, please see some previous works which this paper is a follow up to M.-A. Hermitte, Le droit saisi au vif. Sciences, technologies et formes de vie [Law transformed. Science, Technology and Life Forms], Interviews with F. Chateauraynaud, éditions Petra, 2013, and M.-A. Hermitte, "Artificialisation de la nature et droit(s) du vivant" [Artificialization of Nature and Law for Living Species], in P. Descola, Les natures en questions [The Natures in Question], Odile Jacob, 2018.

I. Global Hazards and Refocus of Legal Categories

This conference has fully evidenced how slowly worldviews towards the environment have changed: there is no point in further discussing it. Nature, once viewed as a pool meant for exploitation has turned into something with which we, as humans co-evolve. The current challenge is to develop the tools relevant to this new approach that values the relationship. Such tools are currently available, in France via the preamble of the Charter for the Environment; in Ecuador, via its Constitution; and in Colombia, via its Supreme Court. How do we qualify in law these new objects we want to protect, such as climate which until then had been viewed as meta-legal? Our first intuition is to think of them in terms of commons to humankind as a whole (see subsection I.A. below). How are we re-articulating these new objects to acting subjects? Climate disputes, which are the main expression of this global identity, reveal a more complex situation than action taken on behalf of the sole "humankind" (see subsection I.B. below).

A. Things for Humankind as a Whole⁵: Is There a Lack of Operative Categories for Common Goods and Common Evils?

In Roman law, both air and the sea were viewed as commons that no-one was allowed to privatize, since they needed to be accessible to all. In the twentieth century, the category of "Common Heritage of Humankind" was meant to express, in the same line of thought, this intuition that some objects of law essential to Humankind as a whole might exist at a given time and for future generations. This was an attempt to link new objects of law (extra-atmospheric space, celestial bodies or atmosphere) to these new subjects of law, namely humankind or future generations. Soon it turned out that the basic characteristics of the newly designed regime, conservation and equitable access as well as the more or less consensual notion of its non-appropriable and inalienable characters (all imprescriptible) did not meet the expectations of mainstream liberal economics. Although these objects have all found a regime, still under discussion, it serves mainly for their exploitation.

⁴ O. Barrière & others, Coviability of Social and Ecological Systems: Reconnecting Mankind to the Biosphere in an Era of Global Change, Springer, 2019, Vols. 1 & 2, available online at https://www.springer.com/gb/book/9783319784960.

⁵ Things extra patrimonio.

For a history of this change in the law of the sea, which had been the most sophisticated avatar of the Common Heritage of Mankind, see J.-P. Beurier, "L'autorité internationale des fonds marins, l'environnement et le juge" [The International Seabed Authority,

In 1992, global warming issues were merely a "common concern of human-kind", as mentioned by the Rio Convention on Climate Change, taken up again in the Paris Agreement. It was not until 11 July 2018 that this concern turned into a "security risk", at a session of the United Nations Security Council. A plan was set out to create an information and warning body in charge of registering correlations between climate change, wars, terrorism and displaced population? In spite of this growing awareness, the climate's legal nature is not addressed.

Let us note that a number of investigations focus on these "positive" objects, "global public goods"; less energy is dedicated to investigating "negative" objects—these "global public evils" — that form all the negative externalities of the production systems. However, some consider waste accumulation as a more serious source of concern than the increasing scarcity of non-renewable resources.⁸

The scientific evidence concerning these issues has been fully disseminated, well enough to trigger action in what is coined "our knowledge societies". However, most administrations are reluctant to take relevant actions that would involve a more frugal economic system.

the Environment and the Judge], in Collectif, La représentation de la nature devant le juge : approche comparative et prospective [The Representation of Nature Before the Judge: Comparative and Prospective Approach], VertigO, 2017.

⁷ In 2018, the Security Council noted that Irak and Egypt were forced for the first time to reduce their arable surface area. L. Maertens, "The UN Security Council debates on climate change", *Revue internationale et stratégique*, 2018/1, No. 109, pp. 105–114.

⁸ See P. Hugon, L'ECONOMIE ETHIQUE PUBLIQUE: Biens Publics Mondiaux et Patrimoines Communs [THE PUBLIC ETHICAL ECONOMY: Global Public Goods and Common Heritage], UNESCO, Economie Ethique, No. 3, available online at https:// unesdoc.unesco.org/ark:/48223/pf0000130599 (accessed 16 June 2019). Hugon often deals with "public ills", but more in the sense of being the opposite of commons, and relevant in the same conceptual sphere as an independent category that has its own regime. On the notion of "common risks" and the uncontrolled circulation of data, cf. J.-S. Bergé & D. Le Metayer, "Phénomènes de masse et droit des données" [Mass Phenomena and Data Rights], to be published in Communication-Commerce-Electronique, Lexis Nexis. I do not agree with many of the statements in P-N. Giraud, L'homme inutile, Paris, Odile Jacob, 2015, but the book does raise the question of an inventory of disparate types of waste, with which to address the question of economic model structures.

B. Climate Change Litigation and the "Schism of Reality": Climate-Aware People as Opposed to Government Denials9

The whistle has been blown long ago and many citizens around the world received the message; however, the obvious incapacity of climate skeptic and climate paralyzed¹⁰ governments to react properly to the threat represents a "schism of reality". Jurists have paid little attention to this notion, coined by political scientists. However, law provides a specific form of visibility for this notion, obvious in what have become known as climate change litigation: lawsuits triggered by some climate-aware individuals, often under age. These claimants submitted to the courts their State's climate policies, whose blindness could violate their fundamental rights, legal mode of reasoning based on this denial of reality: the difficulties they met (see subsection I.B.1. below) will not prevent the slight increase in the power of "young people" and of the future generations (see subsection I.B.2. below).

In this essay, I deal with the climate disputes solely in the context of what they reveal about the legal ontology I am trying to form – which is very reductive. Regarding doctrine, please refer to the long and elaborate bibliography by M. Hautereau-Boutonnet, "Les procès climatiques par la doctrine du procès climatique" [Climatic Processes by the Doctrine of the Climatic Process], in C. Cournil & L. Varison, Les procès climatiques: du national à l'international [Climatic Processes: From the National to the International], Pédone, 2018.

Focusing our attention on the climate skeptics, who are decreasingly credible, has become counterproductive. Inability to address the problem now comes from climate-paralyzed people (who give lip-service but in practice defend the conventional economic activity) and climate-indifferent people (who make up the majority of the world population that refuses to change its lifestyle).

G. Marshall, Le syndrome de l'autruche – Pourquoi notre cerveau veut ignorer le changement climatique [The Ostrich Syndrome – Why our Brain Wants to Ignore Climate Change], Actes Sud, 2017; S. Akyut & A. Dahan, Gouverner le climat ? [Governing the Climate?], Presses de Sciences Po, 2015; M.-A. Hermitte, "Edouard Bonnefous et la biodiversité: 'Vox clamantis in deserto' ou illustration du schisme de réalité " [Edouard Bonnefous and Biodiversity: "The voice of one crying in the wilderness" or Illustration of the Schism of Reality], C. Bréchignac, G. de Broglie & M. Delmas-Marty (eds.), L'environnement et ses métamorphoses [The Environnent and its Metamorphoses], Hermann, 2015.

1. Difficulty of Identifying the Relevant Objects of Law in Order to Curb Global Change

The argumentation submitted to the Supreme Court of Pakistan by a seven-year-old petitioner highlighted precisely that Pakistan continues to invest in coal, despite the country's participation in the COP 21, the existence of a climate minister of a climate plan, and the availability of considerable renewable energy sources. At a global level, "enormous sums of money and resources were spent on further destabilizing climate systems". The International Monetary Fund support to fossil fuel for year 2015 was up to 5,300 billion dollars, including both subsidies and corrections of the negative externalities related to fossil energy. Carrying on in this manner is simply incomprehensible. From a legal standpoint, the first task to undertake would be to correctly delineate the objects in question.

a. The Climate Is Not a Subject of Law

Let us exclude from the start the possibility that the climate could be a subject of law. The climate may happen to be personified by humans complaining about floods, heat waves or the storms; however, there is no way to identify specific needs that would serve as a base to define the right of the climate to be protected from change. One might even assume the climate is enjoying such blasts, so it is unclear which rights the climate could claim to fight for.

b. Few Operative Objects of Law Pertaining to Climate Change Emerge

Greenhouse gases (GHG) are definitely "tangible things" that form an indistinct mass trapped by the greenhouse effect. As a mass, is it a "common evil" to which no clear category is associated?¹³ But should we consider them as "goods", things *in patrimonio*? Yes, indeed, assuming we agree with W. Dross that they are involuntary and undesirable fruits of human activity. Dross proposes to put an end to the "free faculty of abandon" granted to property owners in favor of an

¹² The petition cited was received and made public. Ali v. Federal of Pakistan & Another, Constitutio Petition/No. I of 2016, Supreme Court of Pakistan (Islamabad), available online at https://www.elaw.org/system/files/Pakistan%20Climate%20Case-FINAL.pdf. However, no judgment was ever given.

¹³ It is made up of different molecules, but converted into units of contribution to warming, is undifferentiated. For more on the interest that such masses could have generated, cf. J.-S. Bergé & D. Le Metayer, Communication Commerce Electronique, Dec. 2018, Issue 12, Study No. 20, available online at http://www.universitates.eu/jsberge/?p=23762.

"obligation to reallocate" the GHG emissions at the request of their "neighbor". This solution sounds interesting, yet it seems so unpractical on a day-to-day basis, that it undermines the idea. The current situation entails considering GHG by default as freely abandoned things at the very moment of their production, which has the drawback of placing them in a category of objects for which no-one is responsible and leads to the current dead end. Dross criticizes the modern waste regime, which creates some exceptions for certain objects to the freedom of abandon principle, and imposes various obligations on the producer; thus, transforming waste into an object "of negative value" – not with regard to private interests, according to the most well-known model, but with regard to general interest¹⁵: producers are forced to limit waste production, recycle it, take into account its dangerousness, dump it in the appropriate landfill, and give it a negative economic value at the expense of its producer. However, waste law functions on a case-by-case basis, with all the delays and sluggishness that permits.

This is the solution favored by the Kyoto Protocol and the tools that implement it. The emissions ("released into the atmosphere of certain gases from certain sources"), gases and sources are defined as juridical facts because they are at the core of a network of obligations created by law in order to achieve emissions reduction in certain territories and for certain emitters, and to set a temperature reduction target. The technical device will be an emission permit implemented through the creation of accounting units characterized by their "contribution to global warming"; emission and absorption units, likely to join an existing legal category, "intangible movable property", traded on markets segmented according to their fungibility. ¹⁶

The climate too is defined as a fact: a set of average weather conditions, locally observed over a 30 years period. Climate change is defined as a wider planetary

¹⁴ W. Dross, "De la revendication à la réattribution: la propriété peut-elle sauver le climat ?" [From Claim to Reallocation: can Property Save the Climate?], Recueil Dalloz, 2017, p. 2,553. We could also think of the category, "res nullius" because GHG emissions could be involuntarily compared to these wild animals that prosper on appropriated land and tend to cause damage to the neighborhood.

¹⁵ D. Chilstein, "Les biens à valeur vénale négative" [Goods with Negative Market Value], Revue Trimestrielle Droit Civil, 2006.

¹⁶ For an article with vast bibliography on this type of property, see F-G. Trébulle, "Les titres environnementaux" [Environmental Titles], Revue Juridique de l'Environnement, 2011/2, p. 203, available online at https://www.cairn.info/revue-revue-juridique-de-lenvironnement-2011-2-page-203.htm.

process evolving over a much longer period of time. In legal terms, the climate cannot be reduced to a thing endowed with tangibility because it has no materiality nor localization. On the other hand, it is unclear how the climate can be established as an intangible thing, because if it fits with the basic idea of immaterial wealth, we do not see how to delineate a variety of complex processes, involving fuzzy or unexpected elements. The atmosphere, as a set of gaseous bodies precisely located around the globe, could be more easily classified as a tangible thing common to all humankind. To date, the doctrine struggles to establish these things as global public goods, whose progress is barely visible in positive law.¹⁷

Yet certain judicial rulings reveal that the "climate system" can be qualified in two different directions: an economic vision based on the climate as a natural resource or environmental asset; and an axiological approach that considers the climate as a value, object of a fundamental right, like freedom or life. These avenues are being explored by emerging subjects.

2. Emerging Subjects of Law: "Young People" and Future Generations

So far, no subjects of law have been stabilized. However, there are some emerging stakeholders, mostly young people and future generations.

a. The Paris Agreement and Non-Party Stakeholders: A Status in the Form of a Call for Help. 18

The Paris Agreement, following the *Lima-Paris Action Plan*, dedicated an entire chapter to the notion of "non-party stakeholders" – in other words, any physical

¹⁷ B. Boidin, "Approche économique" [Economic Approach], in Dictionnaire des biens communs, M. Cornu, F. Orsi, J. Rochfeld (eds.), Quadrige, Presses Universitaires de France, 2017.

¹⁸ See, e.g., J.-M. Arbour, "L'impossible défi canadien: lutter efficacement contre les changements climatiques, exporter davantage de pétrole, respecter les compétences constitutionnelles des provinces" [The Impossible Canadian Challenge: Efficiently Fight Climate Change, Export More Oil, Respect the Constitutional Authorities of the Provinces], in Après l'accord de Paris, quels droits face au changement climatique? [After the Paris Agreement, What Rights for Climate Change?], Revue Juridique de l'Environnement, Lavoisier, 2017, No. Special, pp. 73–103; ibid., pp. 105–117 (I. Michallet, "De l'action locale au droit global: l'engagement climatique des villes" [From Local Action to Global Law: Cities Responding to Climate Change]); ibid., pp. 119–133 (M.-P. Blin-Franchome, "Quel rôle pour l'entreprise après l'Accord de Paris?" [The Company's Role After the Paris Agreement?]); ibid., pp. 135–139 (R. Bettin, "Les

or legal persons other than States. Although the role of NGOs has long been recognized in international public law, those who work spontaneously for the good of the climate are now being treated as indispensable partners who will be associated "in parallel" with the COP. These new partners are encouraged to join their efforts and coalesce: this obviously involves the civil society, but also financial institutions, corporations¹⁹ and above all urban areas, which will be home to seven out of every ten inhabitants by 2050. In this regard, they should be the leading players at climate conventions. This shows how maladapted international public law is given its focus on State stakeholders, is maladapted. From this standpoint, the boom of "non-party stakeholders" sounds as a confession by the States' of their own insufficiency. However, that confession does not generate any specific international power, such as a generalized system of preferences between urban areas active in reducing atmospheric pollution.²⁰

b. Humankind?

In legal technique, the solution could have been to recognize humankind as the subject of a right to a climate beneficial to the development of the human species, or of the living world in general, under an eco-centric perspective. But what legitimate representatives could have been found? Every person may stand before any court and plead in their own name wherever they are in the world, but in a much wider perspective than their own interest. Let us mention two cases that recently made headlines.

First, the Court of Appeal in Hamm, Germany, ruled that it would hear the case of S.L. Lliuya, a Peruvian farmer and high mountain guide, against Rheinisch-Westfälisches Elektrizitätswerk (RWE), the main energy emitter of

ONG: moteurs de l'avant, actrices de l'après" [NGOs: Drivers of the "Before", Actors of the "After"]).

¹⁹ Professor Hautereau-Boutonnet anticipated the possible development of a new branch of the *lex mercatoria*, specific to awareness of climate change. M. Hautereau-Boutonnet, "Is the climate *lex mercatoria* a representation of global law?", *Revista de direito international*, Direito Ambiental Global, UniCEUB, 2017, Vol. 14, No. 3, p. 31.

²⁰ M.-P. Blin-Franchomme, "Quel rôle dans la lute le changement climatique pour l'enterprise?" [What Role for Companies in the Fight Against Climate Change?], in M. Hautereau-Boutonnet (ed.), Quel droit pour sauver le climat? [What Right to Save the Climate?], 2018, p. 9, available online at https://halshs.archives-ouvertes.fr/halshs-01684948/document (accessed 16 June 2019) (discussing the "climate social responsibility" dynamic that encourages companies to engage in the Non-State Actor Zone for Climate Action, or NAZCA, portal set up under the Paris Agreement).

Global Energy Services (GES) Europe. Each and every emission by RWE adds to the overall increase in temperature in some way. The farmer's legal theory sought to dilute the traditional concept of the causality link in the sense that, instead of being detrimental to the victim (as can often be the case), it would actually work in their favor because all emissions in some way add to different damages, whatever they take place. The Court ordered a group of experts to establish the causality link between the pollutant waste of RWE and the damages noted in Peru because of the melting glaciers in the Andes and all its local consequences.²¹ RWE does not have a power plant in Peru and, of course, argued that an emitter is not responsible for phenomena that are a result of multiple causes; RWE instead asserted that recognizing such a cause of action could lead to an anarchic situation where everyone sues everyone because each and everybody suffers from and contributes to climate change.²² Indeed, the consequences of recognizing such harm could have financial impacts that would be the most convincing way of engaging industries in a serious energy transformation - one that governments have not managed to impose upon them. These individual cases, which at least at first, may not go very far, thus take on evident collective value.

We may also consider the case of Ashgar Leghari, who petitioned the High Court of Lahore regarding the government's failure to act in the fight against climate change – arguing that the absence of action and delays jeopardized water supplies and food security.²³ The initial governmental action ordered by the court in 2015²⁴ appears to have been somewhat effective, because the court's 2018

²¹ The Peruvian famrer sought an award of damages so he could carry out the necessary work to reconstruct his village. *Cf. M.* Hautereau-Boutonnet & L. Canali, "Paving the way for a preventive climate change tort liability regime", *Journal International de Bioéthique*, 2018, No. 3, n° spécial La responsabilité climatique.

D. Nerbollier, "Réchauffement climatique, un agriculteur péruvien contre le géant allemand de l'énergie" [Global Warming, a Peruvian Farmer against the German Energy Giant], La Croix, 14 Nov. 2017, available online at https://www.la-croix.com/Sciences-et-ethique/Environnement/ Rechauffement-climatique-agriculteur-peruvien-contre-geant-allemand-lener gie-2017-11-14-1200891945.

²³ Order Sheet, Ashgar Leghari v. Federation of Pakistan, W.P. No. 25501/2015, Lahore High Court Green Bench, 04 Sep. 2015, available online at https://elaw.org/system/files/pk.leghari.090415_0.pdf.

²⁴ The court directed several government ministries to: nominate "a climate change focal person" to implement the Framework [of Climate Change Policy (2014–2030)], and to present a list of action points by 31 December 2015, in addition to creating a Climate Change Commission composed of representatives of key ministries, NGO's, and technical experts to monitor the government's progress. *Leghari v. Federation of Pakistan*,

final judgment acknowledges a number of improvements – although admittedly insufficient – in the government's implementation of action plans adopted pursuant to the earlier orders.²⁵ The successful petitioner referred to himself first and foremost as a farmer (therefore, an individual), then as a citizen of Pakistan – i.e., an individual member of a Nation – without taking a step further by identifying himself as a "world citizen" and representing humankind in the legal action.

c. The "Youth Plaintiffs"

Judges are also recognizing "youth" plaintiffs who petition the courts under the intervention of their parents, tutors or guardians – as well themselves. These youth stand before their national judges demanding respect for their rights to a sustainable climate: a sufficient quality of life and a reasonable life expectancy for themselves, their fellow countrymen and their descendants. Some "youth" also stand on behalf of all humankind.²⁶

W.P. No. 25501/2015, Lahore High Court Green Bench, 04 Sep. 2018, available online at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150512_Case-No.-CHR-NI-2016-0001_petition-1.pdf (Summary, with link to "Decision"). The court subsequently issued a supplemental decision on 14 September 2015, naming 21 individuals to the Commission and vesting it with various powers. Leghari v. Federation of Pakistan, W.P. No. 25501/2015, Lahore High Court Green Bench, 14 Sep. 2018, available online at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150512_Case-No.-CHR-NI-2016-0001_petition-1.pdf (Summary, with link to "Decision").

- 25 According to the judgment issued by Judge Syed Mansoor Ali Shah, the government took 66 % of priority measures for the implementation of policies concerning climate change. Leghari v. Federation of Pakistan, W.P. No. 25501/2015, Lahore High Court Green Bench, 25 Jan. 2018, available online at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150512_Case-No.-CHR-NI-2016-0001_petition-1.pdf ("Judgment").
- 26 Since 2011, Emilie Gaillard has noted the acceptance of the concept by environmental law, its migration towards fundamental rights, and the premises for legal action. E. Gaillard, Générations futures et droit privé. Vers un droit des générations futures [Future Generations and Private Law. Towards a Law for Future Generations], Librairie Générale de Droit et de Jurisprudence, 2011, pp. 655–673.

(i) "Youth Plaintiffs": Future Generations Embedded in Present Generations

Strangely enough, while the "future generations" category might have been directly seized, "suspended" as it was in numerous texts without binding force, it was the "youth plaintiffs" category that emerged more directly: "a group of *young* people aged between eight and nineteen ("youth plaintiffs"), Earth Guardians – an association of *young* environmental activists – and Dr. James Hansen, acting as guardian for *future generations*.²⁷ The main focus was on their determination and their precarious future.²⁸ However, the lawsuit also highlighted their incapacity to vote, since they were under age, arguing that the judge was their only recourse.²⁹ Some judges, are moved by their youth. They recognize their interest in demonstrating a causal link between past and present decisions, their vulnerability and that of their descendants; these children who are the present generations, already impacted, represent the present generation, engrossed with future generations, facing a grim fate.

The Supreme Court of Columbia is the only court that emphasized the specific characteristics of the youth plaintiffs' standing: aged 7 to 25, their life expectancy is 78 years and their adulthood will take place from 2041 to 2070. During this period, the temperature will rise between 1.6°C and 2.14°C, and they will be affected by all the hazards involved.³⁰

²⁷ I have chosen to discuss Judge Aiken's ruling because it is particularly well worded. Juliana v. United States, No. 6:15-cv-01517-TC, United States District Court for the District of Oregon, 10 Nov. 2016, slip opinion, available online at https://static1.squarespace.com/static/571d109b04426270152febe0/t/5824e85e6a49638292ddd1c9/1478813795912/Order+MTD.Aiken.pdf. The trial scheduled to start 29 October 2018 has been stayed pending an interlocutory appeal to the United States Court of Appeals for the Ninth Circuit. See E. Brown & others, essay #9 (this book) on "Securing the Legal Right to a Healthy Atmosphere and Stable Climate for the Benefit of All Present and Future Generations".

²⁸ According to her father, a lawyer specialized in environmental law, the seven-year-old Rabab Ali is deeply concerned about climate change that is affecting her and millions of Pakistanis, and will affect future generations. Ali, who swore allegiance to the Earth on 23 April 2015 on "World Earth Day", has never seen the dew on the leaves; only fine particles. She has never heard the birds sing; only rickshaws.

²⁹ *Juliana v. United States*, p. 16 (section I.D., entitled "Summary: This Case Does Not Raise a Nonjusticiable Political Question").

³⁰ This ruling is generally studied in the light of the biological diversity and nature as a subject of law, but it is also relevant to deforestations. The plaintiffs focused on the commitments taken by Colombia in this respect during the Conference of the Parties (COP) 21, therefore in the framework of the climate mechanism.

Conversely, in the *Urgenda* case,³¹ the claim was launched by a "platform" of activists bringing the action as Dutch citizens. They came from all segments of society involved in the ecological transition. They stood on behalf of present and future generations, all over the world. However, the Dutch State argued that the plaintiffs did not have standing to bring claims on behalf of the rest of the world. To justify its ruling in favor of *Urgenda*, the court-highlighted, the court highlighted the characteristics of a climate system which is global by nature. From then on, all NGOs concerned about climate change have rightly argued that everything done in the small state of the Netherlands has a global reach, and everything that is done at the present time will impact future generations.³² Therefore, there is no need to establish Urgenda's capacity to represent some specific generation or country, since the interests of some serve the interest of others.³³

In Switzerland there is a "Climate Seniors Association". As if youth and seniors have distinguishable interests in the climate debate.³⁴

(ii) Consensual Fundamental Rights

From one ruling to the next, the youth plaintiffs claim the same fundamental rights.³⁵ In *Juliana*, Judge Aiken mentions the youth plaintiffs' standing to challenge American climate change policy by asserting constitutional rights: the right to freedom, life and property, plus dignity, including access to water and consequently food security.³⁶ The Supreme Court of Colombia similarly recognized

³¹ *Urgenda Foundation v. Kingdom of the Netherlands*, Case No. C/09/456689/HA ZA 131396, The Hague District Court, 24 June 2015.

³² Ibid., paragraphs 4.6 to 4.8.

³³ Ibid., paragraphs 4.79, 4.83 & 4.92.

³⁴ Klima Seniorinnen, Aînées pour la protection climate [Elders for Climate Protection], *available online at* https://ainees-climat.ch.

³⁵ C. Cournil, "Les droits fondamentaux au service de l'émergence d'un contentieux climatique, Des stratégies contentieuses des requérants à l'activisme des juges" [Fundamental Rights at the Service of the Emergence of a Climate Dispute, Applicants' Contentious Strategies to the Activism of Judges], in M. Torre-Schaub, C. Cournil, S. Lavorel & M. Moliner-Dubost (eds.), Quel(s) droit(s) pour les changements climatiques? [What Right(s) for Climate Change?], éditions Mare & Martin, 2017.

³⁶ Several rulings enrich this basis of diverse principles attached to it: the principle of equity, which not only leads to the principle of common responsibilities, that are different for developing countries, but also to the obligation to take the needs of future generations into account in current policies (*Urgenda*, paragraphs 4.55 and 4.56); the principles of precaution and sustainable development that have an impact on fundamental individual rights (*Urgenda*, paragraph 4.63).

that it can judge the violation of fundamental rights to life, health, freedom and human dignity as determined by the environment and ecosystems: without a healthy environment, subjects of law and sensitive beings in general cannot survive (see Part II below).

(iii) Public Trust vs. the Obligation of Protection and Diligence

The youth plaintiffs' invocation of the right to life is based on specific legal tools. Thus, "Public trust" is an institution of English common law that can also be found in other countries from the U.S. to Pakistan. In the Juliana case, Judge Aiken defined the public trust as encompassing powers so central to the exercise of sovereignty (like the police power), that the State cannot ever waive. Natural resources are a group of assets that the successive governments must preserve to meet the needs of the successive generations of citizens. The legislator cannot therefore bar the State from these rights, just as he cannot bar ports from navigable waters: the legislator is in a similar position than the trustees who are in charge of protecting the common property from damage in the interest of current and future beneficiaries. This imposes limits on the exercise of legislative powers. According to the judge, the American energy and climate policy shows that the State has abdicated that responsibility stemming from its position as a trustee, and this presumed renouncement must be challenged as a violation of substantive due process. The word "abdicate" is the key to these disputes, because it expresses in legal terms the denial of reality that makes governments climate-paralyzed.

In *Urgenda*, the Dutch judges based their ruling on a concept that is more familiar to continental laws: the State's obligation of due diligence in implementing its duties of protection, of both environment and people. It is thus obliged to design a climate plan in accordance with scientific data, to be further implemented and monitored. However, even though the Constitution, the

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³⁷ This capacity to contribute to developing environmental law was addressed long ago in an article by Joseph Sax, highly acclaimed to this day. J. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, Michigan Law Review*, 1969, Vol. 68, p. 417, *available online at* https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2359&context=facpubs; E. Cornu-Thenard, "Eléments sur l'apport de la doctrine du public trust à la représentation de la nature devant le juge" [Elements on the Contribution of the Public Trust Doctrine to the Representation of Nature Before the Judge], *in* Collectif, *La représentation de la nature devant le juge, approches comparative et prospective* [The Representation of Nature Before the Judge, Comparative and Prospective Approaches], *VertigO*, 2017, p. 187.

European Convention on Human Rights and International Climate Change Law are not directly relevant to the case, their norms can serve as guidelines in order to assess whether the State has failed in its obligation to protect vis-a-vis *Urgenda* and more precisely to assess to what extent this limits its discretionary power.³⁸ The court concluded that there was indeed a breach of due diligence because emission reductions were not of a sufficient magnitude to curb the trajectory, causing "reduced future options".³⁹

(iv) Separation of Powers, Right to Trial and Legitimacy of The Judge to Impose an "Order" on the State

The "right to trial" is currently at the heart of climate disputes and reveals, in the domain of law, the schism of reality. Indeed, citizens, as individuals or as groups, are not targeting any specific illegality, but their State's climate policy as a whole, poorly adjusted to scientific data. Consequently, they beg the judges to order governments to change their climate policies. This request is being made in relation to: the American climate policy in general in the *Juliana* case; the percentage and pace of emissions reduction chosen by the State in the *Urgenda* affair; as well as, the development and exploitation of a coal reserve in the petition by the young Rabab Ali. Both urgency and depth of focus feed a conflict between "climate-conscious" citizens and "reality-denying States".

These claims address the separation of powers issue, because political choices are at least partly adjourned for further deliberation. In *Urgenda*, the court deviates from the topic by making the following statement: strictly speaking, there is no separation of powers, but rather a distribution of functions between executive and judicial power, because the Rule of Law demands that the action of political bodies could be assessed by an independent court, even though the court should not get involved in political decisions. A judge, although not elected, has democratic legitimacy of another kind, in another respect, and the obligation to protect citizens from the State, albeit "restrained". The way and the rate in which the objective of 2°C maximum warming is to be achieved,

³⁸ *Urgenda*, paragraphs 4.36 to 4.52.

³⁹ Ibid., paragraph 4.75.

⁴⁰ *Ibid*, paragraph 4.65.

⁴¹ Ibid., paragraph 4.95.

⁴² *Ibid.*, paragraphs 4.97 and 4.100.

is certainly within the discretionary power of the government, but this broad power is not unlimited.⁴³

In the Juliana case, Judge Aiken recalled that although separation of powers is a defensive wall against tyranny, it should not bar any right to file a complaint when fundamental rights protected by the constitution are at stake. All youth plaintiffs brought evidence that they had been personally and tangibly hurt by phenomena such as algae proliferation, a flooded house, and asthma aggravated by forest fires. They were thus able to prove the causal link between the damages they suffered on the one hand and, on the other hand, the United States energy policy in aet since 1751 and the considerable contribution this State makes to global emission levels. A judicial order to change this policy could partly repair their damage. They therefore have the right to "due process": the "genius" of the constitution, which enables it to adapt to new needs as Thomas Jefferson did, this time by taking future generations into account. Judge Aiken thus has "no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society". A stable climate is the foundation of society, "without which there would be neither civilization or progress", especially for future generations. Without taking a stance on the ultimate result, the judge posits that there is a "cause of action". The Supreme Court of Columbia, on the other hand, fulfills its commitment by compelling the State to move towards a more eco-centric society by changing its "an anthropocentric and selfish model",46 characterized by dramatic population growth, adoption of a consumerist system and over-exploitation of natural resources. In this regard,

⁴³ *Ibid.*, paragraphs 4.53 and 4.54. The issues of pace and urgency are important in all these cases. The plaintiffs and the judges all insisted on the urgency of reducing emissions. Some also insisted on the urgency of *not* taking or implementing decisions that obstruct the reduction target. This is particularly dramatic in the case of the enormous coal deposit in Pakistan: according to the young petitioner Rabab Ali, it should not be mined at all. It is also evident in the Dutch case, where the court insisted on the need to speed up the transition to renewable energies. *Ibid.*, paragraph 4.65. Based on data provided by the IPCC, the judges argued that taking immediate action is more cost-effective than acting later. *Ibid.*, paragraphs 4.71 to 4.73.

⁴⁴ Juliana v. United States, p. 1250.

⁴⁵ Ibid.

⁴⁶ Future Generations v. Ministry of the Environment and others, Supreme Court of Colombia, No. STC4360-2018, 5 Apr. 2018, translated by Dejusiticia (unofficial translation of excerpts), p.16, available online at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-docume nts/2018/20180405_11001-22-03-000-2018-00319-00_decision-1.pdf

the presidency and other regional and municipal authorities were ordered to work with the plaintiffs, impacted communities and the concerned public, to formulate an action plan against deforestation and its effects on the climate. The court also ordered the presidency and all the local authorities to make an intergenerational pact against deforestation.⁴⁷

These judges are calling for a revitalization of the "third power". They are encouraged by the need to shake the balance of powers by giving "concerned" citizens a greater role, demanding that scientific data, international law and the general principles of fundamental rights be respected. Christian Huglo⁴⁸ highlights the transformation of the judge's function by taking into consideration global and intergenerational issues that most States have abandoned, by incorporating new sanctions in their orders (or *imperium*, for Mathilde Hautereau-Boutonnet). These would force the defective States to take more serious reduction and adaption measures. This is what the Dutch judges did: they ordered the State to

⁴⁷ This obliges a fight against the interests of the powerful, who are involved in land grabbing, crops for illicit use, infrastructure, agro-business and illegal tree cutting – all profitable activities that aggravate climate change. The separation of powers issue is less relevant to Latin American jurisdictions, using very specific procedures. *Cf.* E.F. Fernandez, "Les controverses autour de l'intérêt à agir pour l'accès au juge constitutionnel: de la défense du droit à l'environnement (Costa Rica) à la défense des droits de la nature (Équateur)" [The Controversies Surrounding the Interest in Acting for Access to the Constitutional Judge: From the Defense of the Right to the Environment (Costa Rica) to the Defense of the Rights of Nature (Ecuador)], *VertigO – La revue électronique en sciences de l'environnement*, Special Issue No. 22, Sep. 2015.

⁴⁸ See C. Huglo, essay #8 (this book) on "Global Warming and the National Courts: A Global Legal Revolution?"; cf. A.-S. Tabau & C. Cournil, "Nouvelles perspectives pour la justice climatique: Cour du District de La Haye, 24 juin 2015, Fondation Urgenda contre Pays-Bas" [New perspectives for Climate Justice: LaHaye District Court, 24 June 2015, Urgenda Foundation Against the Netherlands], Revue Juridique de l'Environnement, 2015/4, p. 200, available online at https://notreaffaireatous.org/. See also London School of Economics and Political Science, Grantham Research Institute on Climate Change and the Environment, http://www.lse.ac.uk/GranthamInstitute/, for an overview as well as rulings linked to all the climate disputes throughout the world.

⁴⁹ M. Hautereau-Boutonnet, Climatic Processes by the Doctrine of the Climatic Process, 2018.

⁵⁰ Pakistan is currently a low contributor, but its emissions are increasing; the opening of the mine will make a major contribution. The Netherlands is a small country and therefore a low contributor at a global level, but the emission level per inhabitant is high. In every contributing State, we must cease to reason in a segmented manner because the phenomenon is global.

11

change the reduction target from 17 % to 25-40 % by 2020, and this over a short period of time, as required by climate change science as well as the international policy that stems from it.⁵¹

The comments of these "climate-aware" judges are severe. Judge Aiken sees the Government's incapacity to admit that its action can be disputed in court as a profound "resistance to change" She regrets that the federal courts have too often been "cautious" and filled with "deference" regarding old habits⁵³: the world has suffered for this because the legal system has not protected the humanity from the collapse of finite natural resources, caused by the uncontrolled pursuit of profit. This fresh look at the third power that must make these issues a "cause of action", completely overturns the argument of the separation of powers. Pakistani judge Syed Mansoor Ai Shah said nothing more⁵⁴: environmental protection has become a central aspect of the fundamental rights system, and environmental justice that is localized to global climate justice must be developed. The renewal of fundamental rights must take place through the invention of "judicial toolkits" capable of compelling governments to respond to climate change.

However, although some progress has been achieved thanks to these courageous judges, the decision of the Supreme Court of Columbia is the only final

^{51 &}quot;The courts impose themselves as a substitute for the political institutions, judged as failures by the victims of climate change. The judge has gradually become a decision-making figure and therefore concurrent to executive and legislative power, awakening existing tensions between law and politics". Author's translation of L. Canali, "Droit du process et climat" [Procedural Law and Climate], in M. Hautereau-Boutonnet, Quel droit pour sauver le climat? sous la direction de Mathilde Hautereau-Boutonnet [What Right to Save the Climate?: Under the Direction of Mathilde Hautereau-Boutonnet], 2018, Université Lyon, p. 10, available online at https://halshs.archives-ouvertes.fr/halshs-01684948/document (accessed 16 June 2019).

⁵² Juliana v. United States, p. 1262.

⁵³ In his ruling of 4 September 2015, the Pakistani judge cited the defense of the Minister of Climate Change, the main target of the farmer, Ashgar Leghari, who gave an account of the framework to other ministers so that each ministry may take part in reducing GHG emissions. He evoked the lack of support from other government bodies and concluded by saying that a period of awareness raising is still necessary. What environmental minister could not adhere to this proposal?

The Court of Lahore recognized that the State's failure to act violates its fundamental rights and ordered each ministry to nominate a head of action for climate change, responsible for putting the 2012 climate plan into practice. It also ordered the Government to create a commission responsible for the implementation of its commitments.

ruling so far. It is a decision on the merits by the nation's highest court, based in part on specific laws about standing in Colombia. Its tangible effectiveness still remains to be proven.⁵⁵ Without being able to assess the effectiveness of the movement in favor of natural elements considered as legal subjects, the opening of the category is following different cultural pathways (*see* Part II below).

II. The Three Paths of Legal Animism

In 1972, Christopher Stone wanted to provide all natural entities – from forests to oceans – with the quality of legal subjects able to plead on their behalf in the courts. Description 1988, "L'homme, la nature et le droit" proposed a legal approach "of all living things", based on the need to think of the "living system" as a totality that links the environment and biomedicine: it was proposed that categories of res and persona be redesigned so as to consider, "the common destiny of humankind and nature, subjects and objects of techno-sciences" and make biological diversity a legal subject. These solutions were both technical, and utopian.

Since then, they have been developed to and fro, based on: concerns about the planet's capacity to function; the change of outlook towards animals and vegetables by some life sciences and society in general; the expansion of indigenous cultures; and, the failures of governments.⁵⁸

M. Hautereau-Boutonnet, "Les procès climatiques par la doctrine du procès climatique" [Climatic Processes by the Doctrine of the Climatic Process]. 2018. The author has carried out precious research on the reality of climate disputes and the doctrine that determines a particular subject in all the environmental disputes; in her article on liability, she provides examples to show that the separation of powers is currently the essential cause of plaintiffs' failures.

⁵⁶ C. Stone, Should Trees Have Standing? Law, Morality, and the Environment, Oxford University Press, 3rd ed., 2010.

⁵⁷ B. Edelman & M-A. Hermitte (eds.), *L'homme, la nature et le droit* [Man, Nature and the Law], C. Bourgois, 1988, p. 238; see also M. Callon, "Éléments pour une sociologie de la traduction. La domestication des coquilles Saint-Jacques dans la Baie de Saint Brieuc" [Elements for a Sociology of Translation: The Domestication of Scallops in the Bay of Saint Brieuc], *L'Année sociologique*, 1986, No. 36.

A. Geslin, "États et sécurité environnementale, états de l'insécurité environnementale: de la recomposition normative des territoires à l'esquisse d'un droit de l'anthropocène" [States and Environmental Security, States of Environmental Security: From the Normative Recomposition of Territories to the Outline of an Anthropocene Right], in J. Tercinet (ed.), États et sécurité internationale [States and International Security], coll. Études stratégiques internationales, Bruylant, Brussels, 2012, pp. 87–104; B. Favre, Unwelt et droit – Le droit de l'environnement au prisme de l'éthologie, Mémoire

Indeed, one of the possible paths in law entailed changing the modalities of confrontation between human short-term interests and the ongoing interests of all living beings. To this end, non-humans, including the ecosystems, had to become subjects of law capable of expressing their needs in court: associations were no longer to merely defend their love for non-humans, but actually be their voice. Although still widely criticized, the idea of integrating non-humans is included in many texts constitutional provisons, legislative enactments that oblige the States to organize territories of co-existence between humans and non-humans, and in legal decisions that recognize animals or ecosystems as if they have rights. All these legal texts describe (at times expressly and others implicitly) non-human subjectivities. Along the same lines, the possibility of pure ecological damage under tort law is recognized in several legal orders. The

- à la Faculté de droit de Lausanne, July 2016; T. Lefort-Martine, *Des droits pour la nature L'expérience équatorienne* [Rights for Nature The Ecuadorian Experience], L'Harmattan, 2018. An unjustly forgotten thesis also makes these points. A. Zabalza, *La Terre & le Droit* [*The Earth & the Law*], Editions Bière, 2007.
- This idea was at the heart of the minority opinion of Judge Douglas in the Sierra Club affair that inspired Christopher Stone. See, e.g., Stone, 2010. The judge wrote: "The river as plaintiff speaks for the ecological unit of life. The sole question is, who has standing to be heard? Those people who have a meaningful relation to that body of water must be able to speak for the values which the river represents". Sierra Club v. Morton, United States Supreme Court, United States Reports, 1972, Vol. 405, p. 727, p. 743 (dissenting opinion by Justice Douglas). Anthropologists say it differently. E. Kohn, anthropologist, says it differently. E. Kohn, Comment pensent les forêts Vers une anthropologie au-delà de l'humain [How Forests Think: Towards an Anthropology Beyond the Human], Zones sensibles, 2017, p. 313, translated by G. Delaplace; ibid., p. 136 (describing "parlerchien"). See also B. Morizot, Les diplomates Cohabiter avec les loups sur une autre carte du vivant [Diplomats Cohabiting with Wolves on Another Map of Life], Wildproject, 2017, p. 60, available online: https://www.wildproject.org/diplomates ("According to werewolf diplomats, it's a case of starting to include categories of animal lifestyles in our language"); ibid., pp. 201 and 203 ("Stratégie de l'interprète" [Interpreter Strategy]).
- 60 Simone Goyard-Fabre went so far as to speak of "perfidious", "absurd" renaturation, and "cynical rerouting". S. Goyard-Fabre, "Sujet de droit et objet de droit, défense de l'humanisme" [Subject of Law and Object of Right, Defense of Humanism], Cahiers de philosophie politique et juridique, Presses Universitaires du France, 1992, No. 22, p. 7. For a recent critique, see G. Giudicelli-Delage & K. Martin-Chenut, "Humanisme et protection de la nature" [Humanism and Nature Protection], in L'environnement et ses métamorphoses [The Environment and its Metamorphoses], Le Monde Hermann, 2015, p. 227.
- 61 The network, Natura 2000, accounts for nearly 13 % of the metropolitan area in France, 40 % in some municipalities and half in La Guyane.

French civil code declares compensable, "non trivial harm caused to the elements or the functions of ecosystems [...]"; therefore, free of all human interest.

My assumption is that these are not unrelated whims, but rather different forms of animism that craft the law by taking three different paths.⁶²

A. Legal Animism with Some Indigenous Touch

Ecuador was the first country to launch this movement. Its 2008 Constitution linked the recognition of nature as a legal subject with indigenous communities. This bold step inspired Bolivia and Columbia, whose Supreme Courts linked classic fundamental human rights to the environment: without a healthy environment, subjects of law and living beings in general cannot survive. This also involves our children and future generations. All environmental shortages (of air, water, etc.) reduce our expectancy of a dignified life. It specifies that fundamental rights involve recognition of "the other" – of otherness, these other people that inhabit the planet, encompassing also the other animal and plant species, the unborn, who should enjoy the same environmental conditions as ours, our relatives and neighbors as such (this is based on the solidarity principle).

⁶² I define legal animism as the different ways the law has to animate the world. In other words, to cause effects to be produced based on the fact that every living entity has needs that extend to the psycho-chemical world it depends on. See M-A. Hermitte & F. Chateauraynaud (eds.), 2013, p. 94 and onwards.

This ruling of Columbia's Constitutional Court of 5 April 2018, followed a previous ruling on May 2017, regarding the pollution of the river *Atrato* by a mining exploitation. After having declared the river a legal subject, the Court ordered the Government to give it a legal representative: a guardian who, working with the inhabitants, would be in charge of taking the necessary action against the illegal mine that used toxic substances (mercury, etc.). In the 2018 judgment, it is worth noting the numerous tangible obligations ordered by the Court: action against illicit crops, illegal mines, irrational expansion of agricultural borders, the obligation to fill the void left by the FARC. *See* Environmental Law Alliance Worldwide, "STC4360-2018 de la Corte Suprema de Justicia, Sala de Casacion Civil, M.P. Luis Armando Tolosa Villabona (2018)", *available online at* https://www.elaw.org/CO_Amazon.

⁶⁴ M.V. Berros, "Defending Rivers: Vilcabamba in the South of Ecuador", in A.L. Tabios Hillebrecht & M.V. Berros, Can Nature have Rights? Legal and Political Insights, Rachel Carson Center for Environment & Society, 2017, No. 6, pp. 37-44; M. V. Berros, "The Constitution of the Republic of Ecuador: Pachamama Has Rights", Environment & Society Portal, Arcadia, 2015, No. 11, available online at http://www.environmentandsociety.org/arcadia/constitution-republic-ecuador-pachamama-has-rights; M.V. Berros, "El estatuto jurídico de la naturaleza en debate (meulen en el

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The Court stigmatizes the ineffectiveness of the measures adopted in the conventional legal ontology and infers from it the need to recognize nature as an authentic legal subject, in accordance with an ecocentric perspective. It also recognizes the need to protect life forms solely on the ground that they are living things and cultural representations, and therefore identifiable as individual legal subjects, all interconnected in the biosphere. This took on particular importance in the Columbian case because of its cultural and ethnic pluralism, and the knowledge of the indigenous communities, recognized as guardians of the environment. A new "bio-cultural rights" approach, based on the interdependence between nature and the human species has to be implemented. This compels us to take seriously the fact that nature and its environment require the full range of rights granted to legal subjects.

The New Zealand model of the *Whanganui River* is technically the most elaborate because it established the new governance in great detail.⁶⁵ Ending a conflict that dated back to the 19th century, an agreement endorsed by the Parliament in 2017 was reached between the Maoris and the Crown declaring the Whanganui River "an indivisible and living whole, in—corporating all its physical and metaphysical elements", "as a legal entity".⁶⁶ The text of the agreement combines classical environmental interests in terms of degradation and pollution with political and cultural interests, pertaining to the capacity of the *Whanganui iwi*, the tribe affected most, to take its destiny into its own hands. The whole change involves a modification of the river governance based on the tribe's cosmological view that enables the river to speak: "I am the river and the river is me". They are the descendants of this "living whole", and are represented by *Te Pou Tupua*, the "human face" that allows to speak with its own voice. This being can no longer be the object of property rights, like an inanimate being. Considering that the voice of the river as well as its physical and spiritual manifestations were silenced by

mundo del derecho)" [The Legal Status of Nature in Debate (Swirling Wind in the World of Law)], Revista de Derecho Ambiental, 2013, No. 36, pp. 133–151.

⁶⁵ C.J. Iorns Magallanes, "Nature as an Ancestor: Two Examples of Legal Personality for Nature in New Zealand", Sep. 2015, Vertigo –la revue électronique en sciences de l'environnement, Special Issue No. 22, Sep. 2015, p. 4, available online at https://journals.openedition.org/vertigo/16199.

V. David, "La nouvelle vague des droits de la nature. La personnalité juridique reconnue aux fleuves Whanganui, Gange et Yamuna" [The New Wave of the Rights of Nature. Recognized Legal Personality at Whanganui, Gange and Yamuna Rivers], Revue juridique de l'environnement, 2017, No. 3, p. 418.

the Crown's legislation for 150 years, it now must be discussed by the descendants of the river.⁶⁷

B. Legal Animism with Religious or Mystical Background

On 30 March 2017, two rulings of the High Court of Uttarakhand at Nainital, now overruled by the Supreme Court, declared that two rivers – the Ganga and the Yamuna – as well as glaciers and a number of other natural elements, were legal subjects. Their rulings were based on a combination of common law, Hindu religious tradition, and scientific data.⁶⁸

The judges declared the Ganga and the Yamuna legal subjects as parens patriae, holders of all the "rights, duties and liabilities" of nature to preserve them. This prerogative allows the sovereign to use its authority to serve defenseless subjects poorly protected by their neighbors, or to settle conflicts related to access to water. Some physical person has to be designated to act "in loco parentis": they will act as "the human face" that will protect the rivers and promote their health and wellbeing. The ruling for the dispute over the Gantori and Yamumonotri glaciers is generally similar to those in cases for rivers, lakes, air, forests and prairies, etc. The Secretary of State was ordered to appoint representatives to ensure that industries, hotels, and Ashrams no longer dump waste into the rivers, thus damaging the health and well-being of the rivers.

⁶⁷ M-A. Hermitte, "Souveraineté, peuples autochtones: le partage équitable des ressources et des connaissances" [Sovereignty, Indigenous Peoples: Equitable Sharing of Resources and Knowledge], in F. Bellivier & C. Noiville (eds.), La bioéquité [Bioequity], Autrement, 2009, p. 115. V. David focuses on the influence of the historical context on these rulings – the imposition of foreign laws that violate traditions: the moghole invasions, British colonization; V. David, 2017, p. 421; M. V. Berros & R. Colombo, "Miradas emergentes sobre el estatuto jurídico de los ríos, cuencas y glaciares" [Emerging Views on the Legal Status of Rivers, Basins and Glaciers], Rivista quadrimestrale di diritto dell'ambiente, 2017, pp. 31–72.

⁶⁸ Lalit Miglani v. State of Uttarakhand & others (Yamuna), Writ Petition (PIL) No. 140 of 2015, High Court of Uttarakhand at Naintial, 30 Mar. 2017, available online at http://lobis.nic.in/ddir/uhc/RS/orders/31-03-2017/RS30032017WPPIL1402015.pdf; Mohd. Salim Petitioner Versus State of Uttarakhand & others (Ganga), Writ Petition (PIL) No.126 of 2014, High Court of Uttarakhand at Naintial, 20 Mar. 2017, available online at https://elaw.org/system/files/attachments/publicresource/in_Salim__riverpersonhood_2017.pdf?_ga=2.14546295.1338751871.1564992986-985906626.1564992986.

⁶⁹ Ganga, pp. 11-12, point 19; Yamuna, p. 64, point 2.

⁷⁰ Ganga, pp. 11–12, point 19; Yamuna, pp. 64–65, point 3.

11

In the *Ganga* case, the Honorable Rajiv Sharma and Alok Singh debated at length which circumstances might induce a jurisdiction to address the "juristic person" category, whenever it is necessary for "necessities in the human development". Having recalled the precedent of granting the status of "juristic entity" to a Hindu divinity who could own and manage its own property, the ruling linked the creation of new legal person to the needs for of human development. This reflection is the universal part of these rulings, which were unfortunately overruled by the Supreme Court of India on the ground that it would be unrealistic under constitutional law, would entail legal complications, and would trigger an unsustainable flow of disputes.

In this specific case, the High Court judges link the religious aspect (i.e., the attachment of Hindus to this sacred and venerated river that provides humans with health and well-being)⁷⁴ to global scientific data, evoking the push of "socio" political-scientific development" that justified this creation. ⁷⁵ They condemn both the Uttar Pradesh and Uttarakhand States, and the Central State's inertia - "sign of non-governance"76 - and order them to form the Ganga Management Board in charge of implementing the ban on mining exploitations, making decisions regarding irrigation, as well as energy and water supplies in both rural and urban areas, regulating navigation, and developing industries that respect environmental protection laws, as they were enshrined in the Indian Constitution. In these rulings, the judges note that the principles of environmental law are outdated. A commission for the rights of nature must thus be established, made up of citizens and "uncorrupted scientists" with no political bias. This commission will be in charge of implementing the right to existence for rivers and lakes, the right to be unpolluted, and the right to have their viability restored. The judges also mention the constitutional rights of Mother Earth, concluding solely that the category of legal person allows us to integrate mountains, glaciers and allnatural elements in the functioning of society.

⁷¹ Ganga, pp. 7-8, point 14.

⁷² *Ibid.*, pp. 6–7, point 13.

⁷³ *Ibid.*, pp. 7–8, point 14; *cf. ibid.*, p. 10, point 16.

⁷⁴ *Ibid.*, p. 11, point 17; see also V. David, 2017, pp. 413 & 420.

⁷⁵ Ganga, p. 10, point 16.

⁷⁶ *Ibid.*, p. 4, point 9.

C. Western Legal Systems: Science-Based Animism

So far, Western legal systems do not expressly acknowledge that natural elements may be legal subjects. However, the institution of an interconnected lattice of spaces organizing the division of territories between humans and non-humans should be justified. It is through justification (mostly based on science) of rules that curb human activities in the name of the vital needs of non-human beings, that European law sheds light on the implicit subjectivization of natural elements.⁷⁷

For example, migratory birds enjoy a right that prevents a vast protected area in Bulgaria from being divided up, in order to preserve the area's "functional unity" and satisfy the birds' needs. In Germany, the (river as well as sea) lamprey and salmon who migrate through the Elbe enjoy a protected migratory corridor several hundreds of kilometers long, intended to ensure their reproduction. Yet, Germany planned to develop a water supply point viewed as indispensable to cooling a coal power station in *Morburg* downstream of the protected area. Considering the interconnections between ecosystems and the possibility that the plant's operations might increase the river's temperature, the Court of Justice for the European Union decided to extend existing upstream restrictions to the downstream area.

Along the same lines, the French Act of 2016 on the reconquest of biodiversity uses several devices to reinforce the objective of co-existence between humans

of natural elements. I have tried to demonstrate that, if this affirmation is perfectly precise, with a few limited exceptions, the contents of rules and more importantly, the reasons behind legal rulings, show implicit but extremely widespread subjectivization. M-A. Hermitte, *La nature sujet de droits* [The Nature Subject of Rights], *available online at* https://www.cairn.info/revue-annales-2011-1-p-173.htm. Please refer to the above. I will take two of the most recent examples from it.

⁷⁸ Accordingly, Bulgaria was condemned in a proceeding before the Court of Justice for the European Union based on the country's failure to fulfil its legal obligations as a member state. European Commission v. Republic of Bulgaria, No. C-141/14, Court of Justice of the European Union, 14 Jan. 2016, available online at http://curia.europa.eu/juris/document/document.jsf?text=&docid=173520&doclang=EN.

⁷⁹ Construction of the Morburg power station, No. C-142/16, Court of Justice of the European Union, 26 Apr. 2017. An interesting attempt on the indivisibility of Pacha Mama evoked without success before an Ecuadorian judge with regard to the British Petroluem platform explosion in the Gulf of Mexico. M.V. Berros, "The Rights of Nature Recognition", in S. Kalantzakos, Energy & Environmental Transformations in a Globalizing World, Nomiki Bibliothiki, 2015.

and non-humans. A step towards biocentrism was made since the expression, "living beings" that also encompasses Human beings, replaces the former expression "animal and vegetable species", that used to exclude it. Humans and non-humans are thus both involved in land management: the creation of "hotspots for biodiversity", a "principle of ecological solidarity", of "ecological continuity", and recognition of the value of ecosystem and environmental services.⁸⁰

The evolution of Western legal systems justifies the term, "scientifically-based legal animism".⁸¹ We are no longer descendants of our rivers and our forests, and we no longer have pre-established human faces to speak legitimately on their behalf. However, nothing can prevent us from forming an inclusive relationship with living beings, based as much on scientific knowledge as on common knowledge and new awareness.

I share the theoretical equanimity of the Indian judges: we do have to create those subjects "needed" by modern societies; however, I also share this combination of anxiety, sadness and anger, that irrigates the doctrine, some texts (without mandatory legal value), and the most important court rulings. There is absolute urgency in all the domains pertaining to climate and biodiversity change. However, to this end, the current environmental law is insufficient. We do need a

⁸⁰ C. Cans & O. Cizel, Loi biodiversité ce qui change en pratique [Biodiversity Law: What is Changing in Practice], Legislative, 2017, p. 68 (S. Mabile, "Principe de solidarité écologique" [The Principle of Ecological Solidarity]); ibid., p. 364 (T. Dubreuil, "Les zones prioritaires pour la biodiversité" [Priority Areas for Biodiversity]); ibid., p. 371 (T. Dubreuil, "Espaces de continuités écologiques" [Spaces of Ecological Continuity]); see also S. Vanuxem, "Les services écologiques ou le renouveau de la catégorie civiliste de fruits" [Ecological Services or the Renewal of the Civilian Fruit Category], McGill Law Journal, 2017, Vol. 62, No. 3, pp. 739–776; ibid., p. 743 (distinguishing between "ecosystem services" – meaning benefits that one ecosystem can bring to other ecosystems, or human societies – and "environmental services", meaning benefits that humans bring to ecosystems).

This type of animism is obviously not included in the categories described by Philippe Descola, in reference to animism, analogism, totemism and naturalism. In fact, the author outlined pure categories while the hybrid western legal systems outlined at least three of them, from which he borrows traits that he redistributes in a new model that puts scientific foundations in the first place, aware that certain scientific approaches are more suitable than others (e.g., ethology v zootechny), and that anthropomorphism, if described, is a precious instrument for changing awareness. This point is developed in M.-A. Hermitte, "Artificialisation de la nature et droit(s) du vivant" [Artificialization of Nature and Law for Living Species], in P. Descola (ed.), Les natures en questions [The Natures in Question], Odile Jacob, 2018, p. 257.

revolution of powers that will make action mandatory, and a revolution of categories encompassing the law of liability as well as fundamental rights, the theory of property rights as well as the theory of persons. In its attempt to balance risks and benefits, along with a list of exceptions that would allow principles to be pragmatic, 82 the current government technique fails to restrain the unlimited spiral of technological desire. The new legal ontology, which partly gives way to animist paths, must enable us to re-establish friendly relations between humans and non-humans, reinvent shared ownership and non-appropriable things, 83 manage resources in such a way that they renew oneself, manage risks according to an ethic of relationship, as opposed to a cold calculation, and rely on non-humans to overcome obstacles. This is indeed a brand-new science of subjects and objects, likely to incorporate the various aspects of the living world.

⁸² See C. Noiville & T. Berger, "L'accès à l'information sur l'environnement, réflexions sur deux causes d'ineffectivité" [Access to Environmental Information, Reflections on Two Causes of Inefficiency], in Sciences et droits de l'homme (Collectif), éditions Mare & Martin, 2017, p. 173.

⁸³ S. Vanuxem & C. Guibet-Lafaye (eds.), Repenser la propriété, un essai de politique écologique [Rethinking Property, an Environmental Policy Test], Presses Universitaires Aix-Marseilles, 2015, Droit(s) de l'environnement [Law(s) of the Environment], p. 194; M. Cornu, F. Orsi & J. Rochfeld (eds.), Dictionnaire des biens communs [Common Goods Dictionary], Quadrige, Presses Universitaires due France, 2017.

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