

## Setting the Scene

**Abstract:** *As reported by the UN Global Compact (2021) 'the world today is facing unprecedented, interconnected environmental challenges in areas including climate change, clean water, ocean health, and biodiversity.'*<sup>1</sup> *Integrated governance efforts are needed to increase nature stewardship and implement nature-centered solutions. Consequently, the sectoral and anthropocentric perspective adopted by the Western constructs of environmental law results in its inadequacy to address the present global ecological emergencies. Anthropocentrism is always human-interest focused and consequently, the non-human component only has instrumental value to humans. Despite the pitfalls of the anthropocentric approach to environmental protection, the regulatory intervention to address the decline of ecosystems has drawn mostly on Western scientific knowledge and worldviews. This has resulted in the exclusion of other equally valuable and valid types of knowledge, such as Indigenous and local knowledge, that view nature as an interconnected system of relationships. To address the shortcoming, a growing body of studies in the field of law and social sciences agrees on the central role that participation plays in underpinning the actors' involvement in environmental decision-making and facilitating action integration; thus, becoming a central ingredient to improve the effectiveness, legitimacy, and equity of environmental governance. The theme of the book is therefore to investigate participation and its evolutionary track as the way towards realizing an integrated system of governance where nature is at the center. Through the lens of global thinking applied to law, this work draws concentric circles exploring the role of participation in shaping governance: from the Arctic region to the institutional framework in ocean governance, towards the integrated narrative of rights-based approaches applied to water governance. The concentric circles develop into a helicoidal structure that brings forward the discourse of participation, extending it from a theoretical reflection to a methodological approach. Concluding reflections on the links between participation and systems thinking lead the book to an end.*

**Keywords:** *Ecological crisis, sectoral solutions, fragmentation, western legal constructs, knowledge integration, global lens, concentric circles of analysis, helicoidal structure, water governance as a case study.*

SUMMARY: 1. Introduction. – 2. The Theme of the Book. – 3. Research Context: The Global Arena. – 4. Good Governance in the Global Arena. – 5. The Role of Global Administrative Law (GAL) in Shaping Environmental Governance. – 6. Case Studies on Water Governance. – 7. Re-positioning Research. – 8. Book Structure.

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<sup>1</sup> UN Global Compact (2021) at <https://www.unglobalcompact.org/what-is-gc/our-work/environment> accessed 27 December 2021.

## 1. Introduction

We are living in a state of climate and ecological emergency.<sup>2</sup> According to the Sixth Intergovernmental Panel on Climate Change (IPCC), ecological irreversible and fast-paced changes are observable in the Earth's climate in every region and across the whole climate system: “[M]any of the changes observed in the climate are unprecedented in thousands, if not hundreds of thousands of years, and some of the changes already set in motion – such as continued sea-level rise – are irreversible over hundreds to thousands of years.”<sup>3</sup>

Attempts to address the impacts of human activities on ecosystems have traditionally been based on sectoral approaches, which ultimately resulted in fragmented actions and sectoral regulatory reforms.<sup>4</sup> The Western-centric environmental law constructs<sup>5</sup> contributed to the fragmentation and proliferation

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<sup>2</sup>United Nations Framework Convention on Climate Change. (2021). *Nationally determined contributions under the Paris Agreement Synthesis report by the secretariat*. [https://unfccc.int/sites/default/files/resource/cma2021\\_08\\_adv\\_1.pdf](https://unfccc.int/sites/default/files/resource/cma2021_08_adv_1.pdf) accessed 27 December 2021; The Intergovernmental Panel on Climate Change (IPCC) (2019). *Special Report on the Ocean and Cryosphere in a Changing Climate*. [https://www.ipcc.ch/site/assets/uploads/sites/3/2019/12/SROCC\\_FullReport\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/sites/3/2019/12/SROCC_FullReport_FINAL.pdf) accessed 27 December 2021; Paradis, S., Goñi, M., Masqué, P., Durán, R., Arjona-Camas, M., Palanques, A., & Puig, P. (2021). Persistence of Biogeochemical Alterations of Deep-Sea Sediments by Bottom Trawling. *Geophysical Research Letters*, 48(2); Fang, X., Hou, X., Li, X., Hou, W., Nakaoka, M., & Yu, X. (2018). Ecological connectivity between land and sea: a review. *Ecological Research*, 33(1), 51-61; Prospathopoulos, A.M. (2016). Anthropogenic Noise in the Marine Environment: Pressures, Trends and Efforts to Prevent the Irreversible. *Oceanography & Fisheries Open Access Journal*, 1(2), 37-39; Hoegh-Guldberg, O., & Bruno, J.F. (2010). The impact of climate change on the world's marine ecosystems. *Science*, 328(5985), 1523-1528; Steinacher, M., Frölicher, T.L., & Joos, F. (2009). Imminent and irreversible ocean acidification. *Solas News*, (9), 6-7.

<sup>3</sup>IPCC (2021) *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.

<sup>4</sup>Brown, K., Viswanathan, K., & Manguiat, M.S. (2005). Integrated Responses. *Ecosystems and Human Well-Being: Policy Responses: Findings of the Responses Working Group*, 3, 425; Poto, M.P. (2020). A Conceptual Framework for Complex Systems at the Crossroads of Food, Environment, Health, and Innovation. *Sustainability*, 12(22), 9692.

<sup>5</sup>As a specialized branch of law, Western environmental law has developed in two phases. The first phase, known as the ‘classic phase’, hinging on the Westphalian origins of international law characterized by the paradigm of state sovereignty, spans from the 1850s to the 1960s and is characterized by a utilitarian, anthropocentric rationale. The second phase, starting in the early 1970s, has seen the scope of environmental law broadening to the protection of the environment for the future generations. After the Stockholm Conference (1972), the first conference to comprehensively deal with environmental problems of broad international significance, environmental protection firmly established as falling within the competence of the UN system. This institutional development was fostered by the creation, still in 1972, of UNEP through UNGA Res 2997 (XXVII) of 15 December 1972, following a recommendation for the creation of a permanent institutional arrangement for environmental protection and improvement within the UN system ([15 June 1972] A/CONF.48/14/REV.1, 29). Other milestones after of the Stockholm

of measures, representing self-contained regimes and thematic fields of law (climate, biodiversity, water crises, air, and land pollution).<sup>6</sup> Such approaches have failed to address the crisis as the connections and synergies between natural and social systems have been largely neglected, compromised, or not sufficiently strengthened.<sup>7</sup> Concerns about systemic and integrated solutions have grown since sustainability and participation became prominent concepts and paradigms guiding decision-making and regulation.<sup>8</sup>

It is widely accepted that sustainability needs participated and integral re-

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Conference were the United Nations (1972). *Action Plan for the Human Environment*. UN. (UN Doc A/CONF.48/14) and the Stockholm Declaration of the United Nations Conference on the Human Environment: United Nations. (1972). *Stockholm Declaration*. UN; and United Nations. (2021). *Rio Declaration*. UN. See Pallemerts, M. (1992). International environmental law from Stockholm to Rio: back to the future. *Review on European Community and International Environmental Law*, 1, 254. Further steps were the World Summit on Sustainable Development 2002, 10 years after the first Earth Summit in Rio de Janeiro (<https://www.earthsummit2002.org/>, accessed 27 December 2021); the Agenda 2030 for Sustainable Development, adopted by all United Nations Member States in 2015 (<https://sdgs.un.org/2030agenda>, accessed 27 December 2021). In the same year, the Paris Agreement was adopted (<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>, accessed 27 December 2021). As will be further explained in the text, such a legal approach to the environment needs to be re-thought and re-addressed. In literature see Pozzo, B. (2021). The Italian Path to Climate Change: Nothing New Under the Sun. In *Comparative Climate Change Litigation: Beyond the Usual Suspects* (pp. 471-484). Springer; Beyerlin, U., & Marauhn, T. (2011). *International environmental law*. Bloomsbury Publishing; Fracchia, F. (2013). *Introduzione allo studio del diritto dell'ambiente. Principi, concetti e istituti*. Editoriale scientifica; Kotzé, L. (Ed.). (2017). *Environmental law and governance for the Anthropocene*. Bloomsbury Publishing; Ferrara, R., Fracchia, F., Rason, N.O., & Crosetti, A. (2018). *Introduzione al diritto dell'ambiente*. Gius. Laterza & Figli Spa; De Lucia, V. (2019). *The 'Ecosystem Approach' in International Environmental Law: Genealogy and Biopolitics*. Routledge; De Lucia, V. (2017). Critical environmental law and the double register of the Anthropocene: A biopolitical reading. In Kotzé, L.J. (Ed.), *Environmental Law and Governance for the Anthropocene* (pp. 97-116). Hart Publishing; De Lucia, V. (2017). Beyond anthropocentrism and ecocentrism: a biopolitical reading of environmental law. *Journal of Human Rights and the Environment*, 8(2), 181-202; Gonzalez, C.G. (2015). Bridging the North-South divide: International environmental law in the Anthropocene. *Pace Environmental Law Review*, 32, 407; M'Gonigle, M., & Takeda, L. (2012). The liberal limits of environmental law: A green legal critique. *Pace Env'tl. L. Rev.*, 30; Bodansky, D., Brunnée, J., & Hey, E. (2007). *The Oxford Handbook of International Environmental Law*. Oxford University Press.

<sup>6</sup> Van Asselt, H. (2014). *The fragmentation of global climate governance: Consequences and management of regime interactions*. Edward Elgar Publishing; Zelli, F., & Van Asselt, H. (2013). Introduction: The institutional fragmentation of global environmental governance: Causes, consequences, and responses. *Global Environmental Politics*, 13(3), 1-13; Zelli, F., Biermann, F., Pattberg, P., & van Asselt, H. (2010). The consequences of a fragmented climate governance architecture: a policy appraisal. In Biermann, F., *Global Climate Governance Beyond 2012: Architecture, Agency and Adaptation* (pp. 25-34). Cambridge University Press; Van Asselt, H. (2007). Dealing with the fragmentation of global climate governance: legal and political approaches in interplay management. *Global Governance Working Paper*, 30.

<sup>7</sup> Brown, K., Viswanathan, K., & Manguiat, M.S. (2005). *Integrated Responses* cit., 429.

<sup>8</sup> Rosenau, J.N. (2017). Globalization and governance: sustainability between fragmentation and integration. In *Governance and Sustainability* (pp. 20-38). Routledge.

sponses from the social, economic, and environmental spheres.<sup>9</sup> However, debates surrounding sustainability have also motivated more fundamental changes in worldviews, which call for integrated perspectives, knowledge systems integration, and co-evolution.<sup>10</sup> Human societies co-evolve with nature through dynamic and reflexive processes occurring at different levels of governance, from local to global.<sup>11</sup> An emerging body of theory defines such coevolving systems as linked socioecological systems.<sup>12</sup>

Socio-cultural and natural ecosystems (involving human and other-than human components) are complex, heterogeneous, dynamically interactive, and extending across boundaries.<sup>13</sup> In contrast, the environmental regulatory regimes tend to be resistant to change, inflexible, and very defensive of their jurisdictions.<sup>14</sup> In the scholars' opinion, inadequate responses to environmental issues often result from the disconnect between the ecosystems and the regulatory frameworks.<sup>15</sup> In addition to this, the Western constructs of environmental law entrench an anthropocentric perspective,<sup>16</sup> where humans are immediate if not the exclusive ambit of concern.<sup>17</sup>

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<sup>9</sup> Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainable Science*, 14, 681-695.

<sup>10</sup> Nissen, M., Kamel, M., & Sengupta, K. (2000). Integrated analysis and design of knowledge systems and processes. *Information Resources Management Journal (IRMJ)*, 13(1), 24-43.

<sup>11</sup> Berkes, F., & Folke, C. (1992). *A systems perspective on the interrelations between natural, human-made and cultural capital*. Beijer International Institute of Ecological Economics, the Royal Swedish Academy of Sciences.

<sup>12</sup> Subramanian, S.M. (2010). Traditional knowledge and biodiversity: Can the co-evolution of the natural and social systems continue. *Traditional knowledge in policy and practice: Approaches to development and human well-being* (pp. 226-39). United Nations; Kemp, R., Loorbach, D., & Rotmans, J. (2007). Transition management as a model for managing processes of co-evolution towards sustainable development. *The International Journal of Sustainable Development & World Ecology*, 14(1), 78-91.

<sup>13</sup> Jacobides, M.G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255-2276; Pimm, S.L. (1984). The complexity and stability of ecosystems. *Nature*, 307(5949), 321-326; Hannon, B. (1973). The structure of ecosystems. *Journal of Theoretical Biology*, 41(3), 535-546.

<sup>14</sup> Richardson, B.J., Mgbeoji, I., & Botchway, F. (2006). Environmental law in postcolonial societies: Aspirations, achievements, and limitations. In *Environmental Law for Sustainability: A Reader*. (pp. 419-421). Hart Publishing.

<sup>15</sup> Young, O.R. (2010). Institutional dynamics: resilience, vulnerability and adaptation in environmental and resource regimes. *Global Environmental Change*, 20(3), 378-385; Young, O.R., & Gasser, L. (2002). *The institutional dimensions of environmental change: fit, interplay, and scale*. MIT press; Folke, C., Pritchard Jr, L., Berkes, F., Colding, J., & Svedin, U. (2007). The problem of fit between ecosystems and institutions: ten years later. *Ecology and society*, 12(1).

<sup>16</sup> The term "Anthropocene" was coined by Paul Crutzen in 2002: Crutzen, P.J. (2002). The "anthropocene". *Journal de Physique IV (Proceedings)*, 12(10), 1-5. EDP sciences. See also Crutzen, P.J. (2010). Anthropocene man. *Nature*, 467(7317), S10-S10; Crutzen, P.J. (2006). The Anthropocene. In *Earth system science in the Anthropocene* (pp. 13-18). Springer.

<sup>17</sup> De Lucia, V. (2020). Rethinking the Encounter Between Law and Nature in the Anthropocene: From Biopolitical Sovereignty to Wonder. *Law and Critique*, 31(3), 329-349.

The entire corpus of soft and hard legal provisions that constitute the architecture of international environmental law,<sup>18</sup> increasingly intersecting the narrative of sustainable development, is deeply embedded on the human centrality (anthropocentric approach) in questions of environmental significance.<sup>19</sup> Such a perspective has also been reflected in the construction of the courts, with, among others, the International Court of Justice's definition of the environment as the 'living space, the quality of life and the very health of human beings, including the generations unborn.'<sup>20</sup>

The sectoral and anthropocentric perspective adopted by environmental law results in its inadequacy to address the present global ecological emergencies.<sup>21</sup> Anthropocentrism is always human-interest focused and consequently, the non-human component has only instrumental value to humans. Humans take precedence and human responsibilities to non-human subjects are assessed based on the benefits that humans can derive from such protection.<sup>22</sup> This mechanism turns out to be inadequate to address the challenges' several dimensions, all reflecting the logic of separation between subjects and objects and perpetuating the paradigm of domination and sovereignty over nature.<sup>23</sup>

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<sup>18</sup> For literature on the history of environmental law see above fn. 5.

<sup>19</sup> De Lucia, V. (2015). Competing narratives and complex genealogies: The ecosystem approach in international environmental law. *Journal of Environmental Law*, 27(1), 91-117; Kopnina, H., Washington, H., Taylor, B., & Piccolo, J.J. (2018). Anthropocentrism: More than just a misunderstood problem. *Journal of Agricultural and Environmental Ethics*, 31(1), 109-127; Bodansky, D., Brunnée, J., & Hey, E. (2012). International environmental law: Mapping the field. In *The Oxford handbook of international environmental law* cit., 1080.

<sup>20</sup> *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, I.C.J. Reports, 1996, 226. See Vinuales, J.E. (2008). The contribution of the international court of justice to the development of international environmental law: a contemporary assessment. *Fordham International Law Journal*, 32, 232; Matheson, M.J. (1997). The opinions of the International Court of Justice on the threat or use of nuclear weapons. *American Journal of International Law*, 91(3), 417-435. For the anthropocentric orientation to environmental protection of the courts see also Petersmann M.-C. (2018), Narcissus' Reflection in the Lake: Untold Narratives in Environmental Law Beyond the Anthropocentric Frame, *Journal of Environmental Law*, 30(2), 235-259; Sands, P. (2007), Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law. In Ndiaye, T.M., & Wolfrum, R. (Eds). *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum of Judge Thomas A. Mensah* (pp. 310-14). Martinus Nijhoff Publishers.

<sup>21</sup> Bornemann, B. (2021). Environmental Governance in the Anthropocene: Challenges, Approaches and Critical Perspectives. In Chandler, D., Muller, F., & Rothe, D. (Eds). *International Relations in the Anthropocene* (pp. 311-329). Palgrave Macmillan.

<sup>22</sup> Shastri, S.C. (2013). Environmental ethics anthropocentric to eco-centric approach: a paradigm shift. *Journal of the Indian Law Institute*, 55(4), 522-530.

<sup>23</sup> On domination, sovereignty and governmentality see Foucault, M. (1980). Power and strategies. In Gordon, C. (Ed). *Power/Knowledge* (pp 134-145). Pantheon Books; Foucault, M. (1982). The subject and power. In Dreyfus, H.L., & Rabinow, P. (Eds). *Michel Foucault: Beyond Structuralism and Hermeneutics* (pp. 201-228). University of Chicago Press; Foucault, M. (1991). Governmentali-

This underlying aspect of environmental law is drawn by modern science, reflecting the phenomenon that de Sousa Santos defines the isomorphism of science and law, expressed in the idea that legal systems reflect the rationality of science.<sup>24</sup> As Western science is based on the idea of mastery of nature, acquired through the knowledge and manipulation of natural laws, similarly laws manipulate social and ecological relations through categorization of the reality and the imposition of the sovereignty and dominion paradigms.<sup>25</sup>

Yet, despite the highlighted shortcomings of the anthropocentric approach to environmental protection, the regulatory intervention to address the decline of ecosystems has drawn mostly on Western scientific knowledge and world-views.<sup>26</sup> This has resulted in the exclusion of other equally valuable and valid types of knowledge, that look at nature as an interconnected system of relationships.<sup>27</sup> To address the shortcoming, a growing body of studies in the field of social sciences and humanities suggests that addressing environmental problems requires collaboration between different actors, whose systems are integrated and nature-centric.<sup>28</sup>

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ty. In Burchell, G., Gordon, C., & Miller, P. (Eds). *The Foucault Effect: Studies in Governmentality*. (pp. 87-104). Harvester Wheatsheaf.

<sup>24</sup> De Sousa Santos, B. (1987). Law: a map of misreading. Toward a postmodern conception of law. *Journal of Law and Society*, 14(3) 279-302; more recently de Sousa Santos, B. (2007). Beyond abyssal thinking: From global lines to ecologies of knowledges. Review (Fernand Braudel Center). *Research Foundation of State University of New York*, 30(1), 45-89.

<sup>25</sup> Foucault, M. (1982). The subject and power. *Critical inquiry*, 8(4), 777-795.

<sup>26</sup> Gough, N. (2002). Thinking/acting locally/globally: Western science and environmental education in a global knowledge economy. *International Journal of Science Education*, 24(11), 1217-1237.

<sup>27</sup> Bignall, S., Hemming, S., & Rigney, D. (2016). Three ecosophies for the Anthropocene: environmental governance, continental posthumanism and indigenous expressivism. *Deleuze Studies*, 10(4), 455-478.; Whyte, K.P. (2014). Indigenous women, climate change impacts, and collective action. *Hypatia*, 29(3), 599-616; Salmón, E. (2000). Kincentric ecology: indigenous perceptions of the human-nature relationship. *Ecological Applications*, 10(5), 1327-1332.

<sup>28</sup> Agrawal, A. (1995). Dismantling the divide between indigenous and scientific knowledge. *Development and change*, 26(3), 413-439; Am, H.M. (2019). Emerging trends in the generation, transmission and protection of Traditional Knowledge, *Indigenous Policy Journal*, 30(1). Republished from the United Nations Permanent Forum on Indigenous Issue, 18<sup>th</sup> Session; Ames, E.P. (2001). *Putting Fishermen's Knowledge to Work. Conference Proceedings: 27-30 August 2001*; Andresen, S., Skodvin, T., Underdal, A. & Wettestad, J. (2000). *Science and Politics in International Environmental Regimes. Between Integrity and Involvement. Manchester and New York*. Manchester University Press; Aswani, S., Lemahieu, A., & Sauer, W.H.H. (2018). Global trends of local ecological knowledge and future implications. *PloS ONE*, 13(4); Atalay, S. (2019). Can Archaeology Help Decolonize the Way Institutions Think? How Community-Based Research is Transforming the Archaeology Training Toolbox and Helping to Transform Institutions. *Archaeologies*, 15, 514-35; Atran, S. (1993). Whither 'ethnoscience'?. In P. Boyer (Ed.). *Cognitive aspects of religious symbolism* (pp. 48-70). Cambridge University Press; Bäckstrand, K. (2003). Civic Science for Sustainability: Reframing the Role of Experts, Policy-Makers and Citizens in Environmental Governance, *Global Environmental Politics*, MIT Press, 3(4), 24-41; Diver, S. (2017). Negotiating Indigenous Knowledge at the Science-policy Interface: Insights from the Xáxli'p Community Forest. *Environmental Science &*

Participation is underpinning the actors' involvement in environmental decision-making and facilitating action integration, thus becoming a central ingredient to improve the effectiveness, legitimacy, and equity of environmental governance.<sup>29</sup>

## 2. The Theme of the Book

Integrated solutions placing nature at the center of the investigation are therefore essential for addressing the global environmental challenges of our time. Starting from this hypothesis, the contribution will explore the evolution of participation in environmental decision-making, investigating how participation has begun to shape environmental governance in the direction of a nature-centered regulatory system. A rights-based approach to participation stemmed from the Rio Declaration in 1992,<sup>30</sup> and due to the influence and evolution of administrative law, environmental rights have become one of the guarantees or pillars of good environmental governance.<sup>31</sup> For the purpose of this contri-

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*Policy*, 73, 1-11; Escobar, A. (2018). *Designs for the pluriverse. Radical interdependence, autonomy, and the making of worlds*. Duke University Press; Esguerra, A. & van der Hel, S. (2021). Participatory Design and Epistemic Authority in Knowledge Platforms for Sustainability. *Global Environmental Politics*, forthcoming; Fa, J.E., Watson, J.E., Leiper, I., Potapov, P., Evans, T.D., Burgess, N.D., & Garnett, S.T. (2020). Importance of Indigenous Peoples' lands for the conservation of Intact Forest Landscapes. *Frontiers in Ecology and the Environment*, 18(3), 135-140; Flores Alonso, M. (2008). Can We Protect Indigenous Knowledge?. In Boaventura de Sousa Santos (Ed.). *Another knowledge is possible. Beyond northern epistemologies* (pp. 249-271). Verso.; Kardos, M. (2012). The reflection of good governance in sustainable development strategies. *Procedia – Social and Behavioral Sciences*, 58, 1166-1173; Lightfoot, S.R. (2016). *Global indigenous politics. A subtle revolution*. Routledge; Litsardou, D., & Klabatsea, R. (2017). *Inclusive Participatory Approaches to Co-Management in Public Land Assets in Protected Areas*, [http://asrdlf2017.com/asrdlf2017\\_com/envoixtefinal/auteur/texte/def/276.pdf](http://asrdlf2017.com/asrdlf2017_com/envoixtefinal/auteur/texte/def/276.pdf) accessed 15 October 2021; Maaka, R., & Fleras, A. (2009). Mainstreaming Indigeneity by Indigenizing Policymaking. Towards an Indigenous grounded analysis framework as policy paradigm. *Indigenous Policy Journal* 20(3), 1-22.

<sup>29</sup> Poto, M.P., & Fornabaio, L. (2017). Participation as the essence of good governance: some general reflections and a case study on the Arctic Council. *Arctic Review on Law and Politics*, 8, 139-159.

<sup>30</sup> See fn 5. Principle 10 of the Rio Declaration 1992 states that "Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided." See [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_CONF.151\\_26\\_Vol.I\\_Declaration.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf) accessed 27 December 2021.

<sup>31</sup> On the impacts that environmental law had on the legal culture of the countries that implemented environmental participatory rights see Caranta, R., Gerbrandy, A., & Müller, B. (Eds). (2018). *The Making of a New European Legal Culture: The Aarhus Convention: at the Crossroad of Comparative Law and EU Law*. Europa Law Publishing.

bution, environmental rights are classified as procedural (also known as participatory or access rights, including the access to information, participation, and access to courts)<sup>32</sup> and substantive (human rights to a healthy environment and nature's rights to life, regeneration, and protection). In this sense, procedural rights are seen as instrumental to the implementation of substantive rights. The development of procedural rights paved the way to the recognition of substantive rights by including other views in the decision-making processes and consequently by giving voice to the supporters of nature rights.<sup>33</sup>

The evolution of environmental rights was ignited by an international environmental law convention that had major impacts on the environmental and administrative legal systems of the signatories and beyond: the 1998 Århus Convention (ÅC).<sup>34</sup> Celebrated as 'the most ambitious venture in the field of environmental democracy under the auspices of the United Nations',<sup>35</sup> the ÅC marked the first milestone in recognizing the environmental rights of non-state actors and the introduction of access rights for the public, which dramatically

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<sup>32</sup> Lohse, E.J., Poto, M.P., & Parola, G. (Eds). (2015). *Participatory rights in the environmental decision-making process and the implementation of the Aarhus Convention: a comparative perspective* (Vol. 205). Duncker & Humblot.

<sup>33</sup> Poto, M.P. (2022). *Thinking About Ocean Governance: by Whom, for Whom?* in De Lucia, V., Elferink, A., Nguyen, L.N. *Vol. on ABNJ*, Series: *Publications on Ocean Developments*, Brill.

<sup>34</sup> United Nations Economic Commission for Europe (UNECE). (2014). *The Aarhus Convention: An Implementation Guide*. (2<sup>nd</sup> ed.) Available at [http://www.unece.org/fileadmin/DAM/env/pp/Publications/Aarhus\\_Implementation\\_Guide\\_interactive\\_eng.pdf](http://www.unece.org/fileadmin/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf) accessed 27 December 2021. On the contribution of the AC to forge a new legal culture see Caranta, R., Gerbrandy, A., & Müller, B. (Eds). (2018). *The Making of a New European Legal Culture: The Aarhus Convention: at the Crossroad of Comparative Law and EU Law*. Europa Law Publishing. Among the many scholars that developed their research on the Århus Convention see recently Bechtel, S.D. (2021). Access to justice on EU level: The long road to implement the Aarhus Convention. *The Opole Studies in Administration and Law*, 19(2), 19-42; Perlaviciute, G., & Squintani, L. (2020). Public Participation in Climate Policy Making: Toward Reconciling Public Preferences and Legal Frameworks. *One Earth*, 2(4), 341-348; Squintani L., & Perlaviciute, G. (2020). *Access to Public Participation: Unveiling the Mismatch between what Law Prescribes and what the Public Wants*. In Peeters, M., & Eliantonoi, M. (Eds). *Research Handbook on EU Environmental Law* (pp. 133-147). Edward Elgar Publishing; Carpita, F. (2019). L'accesso alle informazioni ambientali nel quadro della Convenzione di Aarhus: sfide ancora aperte. *Revista Española de la Transparencia*, 9, 199-215; Caranta, R., Gerbrandy, A., & Müller, B. (Eds). (2018). *The Making of a New European Legal Culture: The Aarhus Convention: at the Crossroad of Comparative Law and EU Law*. Europa Law Publishing cit.; Lohse, E.J., Poto, M.P., & Parola, G. (Eds). (2015). *Participatory rights in the environmental decision-making process and the implementation of the Aarhus Convention: a comparative perspective*, cit., 205; Morgera, E. (2005). An update on the Aarhus Convention and its continued global relevance. *Review of European Community and International Environmental Law*, 14, 138; Wates, J. (2005). The Aarhus Convention: a driving force for environmental democracy. *Journal for European Environmental & Planning Law*, 2(1), 2-11; Croci, E. (2003). La convenzione di Aarhus: verso un nuovo modello di governance ambientale. *La Convenzione di Aarhus*, 1000-1041.

<sup>35</sup> See the foreword by the then Secretary-General of the United Nations Kofi Annan. (2014). *The Aarhus Convention: An Implementation Guide*. United Nations publications.



changed actor dynamics in international negotiations.<sup>36</sup> Involving environmental non-governmental organizations (e-NGOs) in negotiations, opposed to solely state actors, is now recognized as a unique characteristic of environmental conventions and international law.<sup>37</sup> For the first time in the history of international conventions, this new way of conducting environmental negotiations allowed for non-state actors to suggest effective practices to those countries involved, and present practical solutions to improve environmental regulatory systems.<sup>38</sup> Thus, the main objective of the ÅC was to provide new avenues for participatory democracy in environmental matters on an international scale<sup>39</sup> and has even led to a shift in the mentality of legal culture within former Communist countries less familiar with transparency mechanisms.<sup>40</sup> The crowning achievement of these participatory negotiations came with the recognition of the fundamental right for every person ‘to live in an environment adequate to his or her health and well-being’, and in ‘the duty, both individually and in association with others, to protect and improve the environment.’<sup>41</sup> In fact, the right of access to information, the right to participate in decision-making, and the right of access to justice in environmental matters are the logical consequences of the ÅC. More specifically to the context of

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<sup>36</sup> Kravchenko, S. (2007). The Aarhus Convention and innovations in compliance with multilateral environmental agreements. *Colorado Journal of International Environmental Law and Policy*, 18(1).

<sup>37</sup> Bernstein, S. (2004). Legitimacy in global environmental governance. *Journal of International Law and International Relations*, 1(1-2), 139-166; Gemmill, B., & Bamidele-Izu, A. (2002). The role of NGOs and civil society in global environmental governance. *Global environmental governance. Options and Opportunities*, 77-100.

<sup>38</sup> See Kravchenko, S. (2007). The Aarhus Convention and Innovations in Compliance with Multilateral Environmental Agreements. *Colorado Journal of International Environmental Law and Policy*, 18(1), 6. In this work, Kravchenko recalls that these features were observed by herself, who participated in most of the negotiations on behalf of the e-NGO Coalition. In order to pave the way towards the democratization of the Central and Eastern Europe, the Regional Environmental Center for Central and Eastern Europe (REC) in Hungary provided support through funding, guidance, and inspiration for a whole generation of local advocates for environmental democracy (public participation in environmental decision-making) through numerous projects, including the publication of a four-volume series of books: Kravchenko, S. (1998). *Doors to Democracy: current trends and practices in public participation in environmental decision making in the newly independent States*. The Regional Environmental Center for Central and Eastern Europe; Hey, E. (2015). The interaction between human rights and the environment in the European ‘Aarhus Space’. In *Research handbook on human rights and the environment*. Edward Elgar Publishing.

<sup>39</sup> Parola, G. (2013). *Environmental Democracy at the Global Level*. De Gruyter Open Poland.

<sup>40</sup> Caranta, R., Gerbrandy, A., & Müller, B. (Eds). (2018). *The Making of a New European Legal Culture: The Aarhus Convention: at the Crossroad of Comparative Law and EU Law*. Europa Law Publishing cit.

<sup>41</sup> Preamble of the AC. The full text of the Convention is available at <http://www.unece.org/env/pp/treatytext.html> accessed 27 December 2021.

this publication, the second component of the ÅC, known as the ‘Second Pillar’,<sup>42</sup> is structured to allow broader participation in environmental decision-making. Public participation covers three domains: (1) participation in the authorization procedure for certain specific activities, mainly of industrial nature, listed in Annex I (Art. 6); (2) participation in the formulation of environmental plans, programs, environmental policies as well as legislation, binding regulation and standards and legislation that may have a significant effect on the environment (Art. 7 and 8); and (3) participation in decisions concerning the deliberate release of genetically modified organisms into the environment.<sup>43</sup> Granting access rights and allowing for the participation of interested parties in environmental decision-making has led to the opening of administrative legal culture to concerted, transparent, and integrated decisions within the realm of environmental law.<sup>44</sup> Such an opening facilitated the evolution of participatory rights for nature to the substantive rights of nature and created an effective environmental regulatory system that places nature at the center of investigation and protection.<sup>45</sup>

Widely enforced, even though not yet implemented by all signatories, the ÅC paved the way to the expansion of participatory rights for nature to vulnerable groups, including Indigenous peoples, by creating a fertile ground for the approval of the 2018 Escazú Agreement (EA) for Latin America and the Caribbean.<sup>46</sup> The EA, negotiated twenty years after and expressly carrying

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<sup>42</sup> The ÅC is divided into three Pillars, corresponding to the three sets of access rights: Access to information (First Pillar), Participation (Second Pillar), and Access to Justice (Third Pillar).

<sup>43</sup> Poto, M.P. (2018). The Second Pillar of the Aarhus Convention and Beyond. Comparative Analysis of the Implementing Systems Vis-à-Vis their Legal Culture. In Caranta, R., Gerbrandy, A. & Mueller, B. (Eds). *The Making of a New European Legal Culture: The Aarhus Convention* (pp. 349-371). Europa Law Publishing.

<sup>44</sup> Poto, M.P. *The Second Pillar of the Aarhus Convention and Beyond. Comparative Analysis of the Implementing Systems Vis-à-Vis their Legal Culture* cit., 354.

<sup>45</sup> Poto, M.P., (2022). Thinking About Ocean Governance: by whom, for whom? cit., 18.

<sup>46</sup> Regional Agreement on Access to Information (2020). *Public Participation and Justice in Environmental Matters in Latin America and the Caribbean*. available at <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf>, accessed 27 December 2021. For updates on signature and ratification status see: <https://observatoriop10.cepal.org/en/treaties/regional-agreement-access-information-public-participation-and-justice-environmental>, accessed 27 December 2021. The EA is the first agreement of its kind because representative of indigenous groups and civil society organizations were engaged in the negotiations and included as beneficiaries of the Agreement provisions. One example among many the participation of the organization DAR (Derecho, Ambiente y Recursos Naturales) committed to building and strengthening environmental governance and promoting the exercise of human rights in the Amazon Basin. DAR focuses on issues of environmental policy and legislation, indigenous peoples’ rights, climate change and investment and good governance in the areas of infrastructure and extractive industries: see <https://civicus.org/index.php/media-resources/news/interviews/3728-escazu-the-work-of-civil-society-made-a-huge-difference> accessed 27 December 2021.

forward the ÅC legacy,<sup>47</sup> further opened environmental decision-making to new actors and their views on nature; consequently expanding the horizons of rights from merely participatory to substantive.<sup>48</sup> Passing the baton of environmental decision-making to the carriers of nature-centred views, the EA opened perspectives for the gradual recognition of the rights of nature also at the international level. In the prelude, the EA parties reinforce the conviction that ‘access rights contribute to the strengthening of, *inter alia*, democracy, sustainable development, and human rights’;<sup>49</sup> additionally, in Article 9 the EA expressly qualifies the carriers of nature-centered views as ‘human rights defenders in environmental matters, whose safe and enabling environment shall be guaranteed so that they are able to act free from threat, restriction, and insecurity.’<sup>50</sup> Thus, the EA brought forward the discourse on actors involved in environmental decision-making.<sup>51</sup> Beneficiaries of the agreement are the people of the involved region – the most vulnerable groups and communities in particular – recognized as human rights defenders that contributed to strengthening democracy, access rights, and sustainable development.<sup>52</sup> Involving vulnerable groups was present in embryonic form in the AC; the EA marks a step forward towards a rights-based approach in a system of accountable, responsive, and inclusive environmental governance, that gives voice on environmental matters (which, according to Art. 6 (3) g, include climate change) to environmental defenders (Art. 9 cit.), be them Indigenous peoples,

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<sup>47</sup> Moreover, as expressly mentioned in the Foreword of the EA, the year of approval marks the 20<sup>th</sup> Anniversary of the Declaration of Human Rights Defenders: [https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428_en.pdf), accessed 28 October 2021.

<sup>48</sup> Guerra, S., Parola, G. (2019). Implementing Principle 10 of the 1992 Rio Declaration: A Comparative Study of the Aarhus Convention 1998 and the Escazú Agreement 2018. *Revista Jurídica*, 2(55), 1-33.

<sup>49</sup> See Preamble of the EA at <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf> cit.

<sup>50</sup> See the EA at <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf> cit.

<sup>51</sup> Prior to the EA, several initiatives – not all of them binding, however – have been conducted in Latin America to promote and protect participatory rights for nature and rights of nature: here we may note the Peoples’ World Conference on Climate Change and the Rights of Mother Earth, hosted by the Plurinational State of Bolivia in Cochabamba, 20-22 April 2010, followed by the Universal Declaration of the Rights of Mother Earth. See UNGA Resolution 73/235, [https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/04/A.RES\\_.73.235.pdf](https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/04/A.RES_.73.235.pdf), accessed 28 October 2021. On EA see Guerra, S., & Parola, G. (2019). Implementing Principle 10 of the 1992 Rio Declaration: a comparative study of the Aarhus Convention 1998 and the Escazú Agreement 2018. *Revista Jurídica Unicuritiba*, 2(55), 1-33.

<sup>52</sup> López-Cubillos, S., Muñoz-Ávila, L., Roberson, L.A., Suárez-Castro, A.F., Ochoa-Quintero, J.M., Crouzeilles, R., & Runting, R.K. (2021). The landmark Escazú Agreement: An opportunity to integrate democracy, human rights, and transboundary conservation. *Conservation Letters*, e12838.

or local communities, whose survival depends on nature and is threatened by large-scale projects of resources extraction, industrialization, and so-called development.<sup>53</sup>

If it is quite clear that both AC and EA led to the international legal recognition of effective participation for the environment, it is still needed to clarify how and whether such environmental actors' mobilization crossed and enhanced environmental and climate law, and ultimately how and whether such participation for the environment resulted in an enhancement of the rights of humans and non-humans (including nature) in the context of climate change and environmental action.<sup>54</sup> A promising, albeit partial, development towards the recognition of the other voices in climate-related matters can be ascertained along the path of the rights of nature's recognition (RoN, a part of the substantive environmental rights). Strengthening nature's rights does not only have relevance for the recognition and articulation of rights of nature, it is also a mindful and intentional act of recognition, restoration, and revitalization of human rights of Indigenous peoples and other communities that have long been marginalized and excluded from environmental decision-making processes. Recognizing and articulating RoN validates and strengthens procedural Indigenous rights because it acknowledges the Indigenous initiatives towards such recognition: it is by means of their participation that nature rights are acknowledged, and therefore such participation translates into recognition and restoration of their knowledge, value-sets, and voice. Recognizing and articulating RoN validates and strengthens substantive human rights: RoN include human rights, as nature includes humans,<sup>55</sup> because, in the view of Indigenous and communities, both humans and nature are part of an extended ecological family that shares ancestry and origins.<sup>56</sup> Healing the Earth through such a recognition restores, heals, and strengthens the umbilical cord between nature and humans.

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<sup>53</sup> See 'What Does It Mean To Leave No One Behind? A UNDP discussion paper and framework for implementation July 2018', available at [https://www.undp.org/content/dam/undp/library/Sustainable%20Development/2030%20Agenda/Discussion\\_Paper\\_LNOB\\_EN\\_lres.pdf](https://www.undp.org/content/dam/undp/library/Sustainable%20Development/2030%20Agenda/Discussion_Paper_LNOB_EN_lres.pdf), accessed 28 October 2021.

<sup>54</sup> Peeters, M. & Nóbrega, S. (2014). Climate Change-related Aarhus Conflicts: How Successful are Procedural Rights in EU Climate Law?. *RECIEL*, 23(3), 354-366. See also [https://www.ciel.org/wp-content/uploads/2019/09/PromotingParticipation\\_EntryPoints\\_COP25\\_final.pdf](https://www.ciel.org/wp-content/uploads/2019/09/PromotingParticipation_EntryPoints_COP25_final.pdf), accessed 27 December 2021.

<sup>55</sup> The word "human" comes from the Latin *humanus*, that derives from *humus* (terra, soil, Earth). Humans are earthlings.

<sup>56</sup> Salmón, E. (2000). Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship. *Ecological Applications*, 10(5), 1327-1332.

### 3. Research Context: The Global Arena

The evolution of environmental participation is deeply entrenched with the development of a polycentric, fluid,<sup>57</sup> multi-tiered, and multi-issues system of governance, by the effect of the increasing impact of global thinking on the legal realm.<sup>58</sup> Global thinking has fascinating origins which allow for a transition away from the straitjacket of Western-centric legal classifications.<sup>59</sup> In the realm of law, global thinking has led to the progressive observation of the interactions of legal institutions as an interconnected web, in which spatio-temporal coordinates<sup>60</sup> assume new meanings and are complemented by other variables, such as the no-space and the a-temporal dimensions of cyberspace.<sup>61</sup> In this regard, studies have highlighted how, since the end of the Cold War, the terms ‘cyberspace’ and ‘global governance’ have become interlaced to ex-

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<sup>57</sup> The term echoes the ‘liquid modernity’ of Zygmunt Bauman, coined the term to explain the transient characteristics of the expression, to denote a new kind of society: ‘it is indeed used, in contemporary political language, as a name for the passage from one known state to another known state’. Tabet, S. (2017). Interview with Zygmunt Bauman: From the modern project to the liquid world. *Theory, Culture & Society*, 34(7-8), 131-146. For the purpose of this contribution, the metaphor could be adopted to represent the passage from the familiar state-sovereignty model to a pluri-actor or polycentric system of governance.

<sup>58</sup> Juergensmeyer, M. (Ed). (2014). *Thinking Globally: A Global Studies Reader* (pp. 1-456). University of California Press. The author reminds that some global studies scholars avoid the term “globalization” because it can be interpreted as an acritical promotion of Western economic models; other scholars prefer the use of “critical global studies”, positioning their research in the critics of economic models of globalization. In this contribution, to the possible extent, I chose to adopt the terms “global/globally” in the attempt to neutralize the political implications of the term “globalization” to the fullest possible extent. The term “global” is here synonym of a round, multidimensional, and polycentric system. On the impacts of global phenomena on law and governance see also Ferrarese, M.R. (2021). Al di là della globalizzazione: verso un mondo post-globale?. *Politica del Diritto*, 52(2), 259-274; Belmonte, R., & Cerny, P.G. (2021). Heterarchy: Toward Paradigm Shift. *World Politics, Journal of Political Power*, 14(1), 235-257; Garcia, D. (2021). Global commons law: norms to safeguard the planet and humanity’s heritage. *International Relations*, 2; Wenzlhuemer, R. (2010). Globalization, Communication and the Concept of Space in Global History. *Historical Social Research / Historische Sozialforschung*, 35(1 (131)), 19-47.

<sup>59</sup> Sachsenmaier, D. (2006). Global History and Critiques of Western Perspectives. *Comparative Education*, 42(3), 451-470.

<sup>60</sup> Meccarelli, M., & Solla Sastre, M.J. (Eds). (2016). Spatial and temporal dimensions for legal history: an introduction. In *Spatial and Temporal Dimensions for Legal History: Research Experiences and Itineraries, Global Perspectives on Legal History* (p. 5). Max Planck Institute for European Legal History.

<sup>61</sup> Governance and cybernetics share the same roots, from the ancient Greek verb *kybernao*, ‘steering a ship’. See Poto, M.P. (2021). The Law of The Sea and Its Institutions: Today’s Hermeneutic Approach and Some Suggestions For an Ocean-Centred Governance Model. In Johansen E., Busch S., Jakobsen I.U. (Eds). *The Law of the Sea and Climate Change. Solutions and Constraints* (Chapter 15, pp. 354-373). Cambridge University Press.

press new interactions that also affect the realm of law.<sup>62</sup> And it is probably not surprising that the two entered the lexicon almost simultaneously. From its beginning, the Internet disclosed a new order based on interconnection and decentralization, while the expression of the ‘world as a global village’<sup>63</sup> encouraged the idea of an increasingly interconnected web of transnational and supranational systems of governance.<sup>64</sup> Both the development of the Internet and the progressive shift of the world relationships towards global interactions heralded the growing mobility of persons, knowledge systems, as well as legal practices across geographical boundaries.<sup>65</sup> Thus, both terms have reflected a perception that territorial borders might no longer be as significant as they were. The legal scholarship has been discussing the rise of global law beyond the state, of networks beyond hierarchical orders, latching onto cyberspace as a site for considering non-state-based constitutionalism.<sup>66</sup> In this regard, it has been observed how the final, unilateral, binding decision of the sovereign state is replaced by a sequence of decisions within a variety of observational positions in a network.<sup>67</sup> The actors involved in the new interactions shift from a flat conception of territoriality to a cyber-space, with the characteristics of inter-connectivity, virtuality and expansion of temporal and spatial borders.<sup>68</sup> In this global world, barriers are overcome and the relationships between past, present, and future are redefined.<sup>69</sup> In law, as well in other disciplines, overcoming spatiotemporal coordinates also means overcoming the Western-

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<sup>62</sup> Berman, P.S. (2002). The globalization of jurisdiction. *University of Pennsylvania Law Review*, 151(2), 311-545.

<sup>63</sup> McLuhan, H.M. (1966). *Marshall McLuhan*. In *Information Theory*, 234.

<sup>64</sup> Berman, P.S. (2002). *The globalization of jurisdiction* cit., 315. George Washington University Law School.

<sup>65</sup> Shamir, R. (2005). Without borders? Notes on globalization as a mobility regime. *Sociological Theory*, 23(2), 197-217.

<sup>66</sup> Teubner, G., & Fischer-Lescano, A. (2004). Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law. *Michigan Journal of International Law*, 25(4), 999-1046; Cassese, S. (2004). Administrative law without the state-The challenge of global regulation. *New York University Journal of International Law and Politics*, 37, 663.

<sup>67</sup> Teubner, G., & Fischer-Lescano, A. (2004). Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law. *Michigan Journal of International Law* cit., 1033.

<sup>68</sup> McLuhan, H.M. (1966). *Marshall McLuhan*. In *Information Theory* cit., 234; Federman, M. (2006). The Cultural Paradox of the Global Village. *Social Anthropology*, 19(1), 40-55; Ngeles Chaparro-Domáñez, M.Á., & Repiso, R. (2020). Diffusion and impact of Marshall McLuhan’s published work in the Web of Science. *Malaysian Journal of Library and Information Science*, 25(1), 67-81. See also <http://airpower.airforce.gov.au/APDC/media/PDF-Files/Pathfinder/PF157-What-is-Cyberspace-Examining-its-Characteristics.pdf> and <http://individual.utoronto.ca/markfederman/CulturalParadoxOfTheGlobalVillage.pdf> both accessed 27 December 2021.

<sup>69</sup> Federman, M. (2000). On Reading McLuhan. *McLuhan Program in Culture and Technology*, 1, 35-46.

centred perspective.<sup>70</sup> The model of reticular collaboration consists of a system in which the dynamics between actors are resolved via interdependent and non-hierarchical relations. The phenomenon of network creation is double-sided: the emersion of new actors has influenced the rise of the network system; on the other side, the network system has broadened the target of actors beyond national states.<sup>71</sup> Manuel Castells pushes the metaphor to the conclusion that, in the global system, the network is the new form of state, 'characterized by sovereignty and responsibility, flexibility of procedures of governance, and great diversity in the relationship between governments and citizens in terms of time and space.'<sup>72</sup>

Examining the problematic issues that the networks system generates also helps to identify its inner structure. Castells emphasizes that one of the major problems of the network system is coordination between old and new structures, in which the states that previously relied on territoriality to exercise their authority are confronted, in the reticular dimension, with agencies that have different structures and *modus operandi*.<sup>73</sup> The coordination issue is also reflected in communication challenges, since the advent of the World Wide Web and computer networks destabilizes the old communication channels, pressuring the bureaucracies to widen participatory mechanisms;<sup>74</sup> however, coordination is not the only crucial feature of an efficient network. Hence, the need to establish a common core of values becomes the priority for a system of good governance. These values include opposition to market-driven forces, acceptance of sustainable development in environmental law, and prioritization of human and nature rights over security issues. The common denominator of these values is inclusivity, participation, and integration of all the parties' views and knowledge in the decision-making.

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<sup>70</sup> Foucault, M., & Miskowicz, J. (1986). Of other spaces. *Diacritics*, 16(1), 22-27.

<sup>71</sup> The exchange of information as a way of regulating into a network system was first studied by Slaughter, A.-M. (2004). *A New World Order*. Princeton University Press; van Dijk, J.A.G.M. (2006). *The Network Society*, (2<sup>nd</sup> Ed.). Sage Publications. On the application of the network model to administrative law in the EU see Chiti, E. (2012). L'accountability delle reti di autorità amministrative dell'Unione europea. *Rivista Italiana del Diritto Pubblico Comunitario*, 1, 29.

<sup>72</sup> Castells, M. (2008). The new public sphere: Global civil society, communication networks, and global governance. *The Annals of the American Academy of Political and Social Science*, 616(1), 78-93.

<sup>73</sup> *Ibidem*, 88.

<sup>74</sup> *Ibidem*, 88.

#### 4. Good Governance in the Global Arena

If this new borderless world, shaped on networking and global connections, is based on the bonds among the parties rather than on spatial-temporal coordinates, it is then necessary to track the ruling principles that govern such a platform. The parallel to the private law domain here comes naturally: a sound society is established on statutory provisions, as a private company is built around the statutes or by-laws that define its scope.<sup>75</sup> Municipal governments, as the earliest form of civil societies, are established by statutes and are expected to pursue the objectives of public interest.<sup>76</sup> In a very similar way, private companies are established and governed by statutes and by-laws, to which the objectives and governing rules are to be explicitly identified and described<sup>77</sup>. Even from a linguistic perspective, the parallel between public and private bodies is self-evident. The Latin word *societas* and the use of such a word in many Roman languages to refer to both a local community (traditionally belonging to the public law domain) and to a company (traditionally ruled by private law) testifies to the long-lasting connections between public and private entities. The words *société* in French, *società* in Italian, *sociedad* in Spanish, *sociedade* in Portuguese, and *societate* in Romanian are still used to define both private organization and public communities.<sup>78</sup>

Keeping the parallel structure between private and public communities, it is evident that the similarities of a private entity and a public structure, in many ways, are greater than the differences between them. It is always about actors' relations and preventing the conflicting interests of the parties from becoming obstacles to the pursuit of the entity's common interest. Participation is the answer to building and sustaining cohesive and sound communities, be they private or public, and in this sense can be considered the synecdoche of good governance and ultimately, as the master-key to open the doors to a well-governed, sustainable system.

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<sup>75</sup> Kjaer., P.F. (2018). From the Private to the Public to the Private? Historicizing the Evolution of Public and Private Authority. *Indiana Journal of Global Legal Studies*, 25(1), 13-36.

<sup>76</sup> Onida, P.P. (2006). La causa della *societas* fra diritto romano e diritto europeo. *Diritto@ storia*, (5); Kaviraj, S., & Khilnani, S. (Eds). (2001). *Civil society: history and possibilities*. Cambridge University Press.

<sup>77</sup> For a description of the evolution of public groups from an anthropological perspective, see Mosko, M.S. (1989). The Developmental Cycle Among Public Groups. *Man*, 24(3), 470-484.

<sup>78</sup> The Greek philosopher Aristotle first identified the original features of the civil society in *Politica* (Τὰ πολιτικά), I, 1252. See Hallberg, P., & Wittrock, B. (2006). From *koinonía politiké* to *societas civilis*: birth, disappearance and first renaissance of the concept. Modernity: One, None, or Many? European Origins and Modernity as a Global Condition. In Wagner, P. (Ed.). *The languages of civil society* (pp. 28-52). Berghahn Books.



## 5. The Role of Global Administrative Law (GAL) in Shaping Environmental Governance

The structure of global governance and its principles have developed dramatically and found its application in the realm of administrative law. The emerging patterns in global governance that were little noticed when one of the most famous articles on Global Administrative Law (GAL) was published have now become part of a bigger picture, as well as one of the most recognizable landmarks in the panorama of comparative administrative law.<sup>79</sup> During the summer of 2005, Benedict Kingsbury, Nico Krisch, and Richard B. Stewart identified and masterfully assembled ‘some patterns of commonality and connection sufficiently deep and far-reaching as to constitute an embryonic field of global administrative law.’<sup>80</sup> Since then, it is undeniable that the development of a global governance system has been transforming the structure of international law. Today, GAL is a well-known umbrella that identifies the study of administrative law beyond the state, involving a plurality of actors.<sup>81</sup> Analysis through the GAL lens can cover a subjective and objective perspective. Both actors and principles can respond to dynamics that in many respects can be defined as global, since they have an infra- and supra-national dimension, and are common to a diverse group of consociates or communities. Examples of global tools include the non-hierarchical order and the dialogue between authorities, technical bodies, and agencies through a network structure. The global administrative order does not shape the traditional structure of a hierarchical pyramid but is a stratification of different layers, interwoven together.<sup>82</sup> Protecting the environment is a challenge that can only be solved

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<sup>79</sup> Kingsbury, B., Krisch, N., & Stewart, R.B. (2005). The Emergence of Global Administrative Law. *Law and Contemporary Problems*, 68(3/4), (pp. 15-61). Duke University School of Law; De Bellis, M. (2016). *Bibliography on global administrative law*, <http://www.iilj.org/wp-content/uploads/2016/08/GAL-Bibliography-June-2006.pdf> accessed 28 October 2021.

<sup>80</sup> *Ibidem*, 15.

<sup>81</sup> For a rich bibliography of GAL see Casini, L. (2016). *Global administrative law scholarship*. In Cassese, S. (Ed). *Research handbook on global administrative law*. Edward Elgar publishing.; Carrotti, B., & Casini, L. (2006). Global administrative law: bibliography. *Global Jurist Advances*, 6(3); De Bellis, M. (2016), *Bibliography on global administrative law*, <http://www.iilj.org/wp-content/uploads/2016/08/GAL-Bibliography-June-2006.pdf> accessed 27 December 2021.

<sup>82</sup> Cassese, S. (2006). *Il diritto amministrativo globale. Oltre lo Stato*. Laterza; Cassese, S., & Conticelli, M. (Eds). (2006). *Diritto e amministrazioni nello spazio giuridico globale* (Vol. 2). Giuffrè Editore; Cassese, S. (2005). Il diritto amministrativo globale: una introduzione. *Rivista Trimestrale di Diritto Pubblico*, (2), 331-358. Recently see also Della Cananea, G. (2009). *Al di là dei confini statuali. Principi generali di diritto pubblico globale*. Il Mulino; Ferrarese, M.R. (2007). Il diritto orizzontale. L'ordinamento giuridico globale seconda Sabino Cassese. *Politica del Diritto*, 38(4), 639-652.

through global regulation, along with the protection of human and nature's rights.<sup>83</sup>

As elaborated in the previous sections, the evolution of international environmental law, even though still from a Western-centric perspective, has progressively opened the doors to an approach that seems to encompass inclusion, participation, and integration of views, legal regimes, and knowledge systems. An example of how global dynamics are reflected in the new Western structure of international environmental governance is offered by the Agenda 2030 and its 17 Sustainable Development Goals (SDGs).<sup>84</sup> The adoption of the integrated and indivisible SDGs and the climate change negotiations leading to the Paris Agreement in 2015 provide first-hand evidence for the broad, polycentric concern shared by state governments, international institutions, regional and local authorities, transnational private actors, Indigenous peoples, and communities, as well as organized civil society to constitutionalize sustainability at the macro or global level. As will be further developed in the following chapters, despite such an attempt towards more integrated and global interactions in the elaboration of responses to climate and environmental challenges, both the Agenda 2030 and the Paris agreement make limited concessions to counter-hegemonic claims, leaving the final word on decision-making to the state parties.<sup>85</sup> The result is that both mechanisms, the SDGs and the Paris Agreement, express weak governance instruments, reflecting the shortcomings of sectoral and state-centered approaches to environmental action.<sup>86</sup>

As hinted above and further argued in the next chapters, a more prominent role of the language of human and nature rights and obligations is therefore seen as critical to overcoming the Western-centered paradigm, for the development of an effectively global and borderless regime that places the Earth at the center of regulation and protection. In this regard, as repeatedly pointed out, notions such as participation and nature-centered approaches are crucial to providing an empirical testing ground for the effectiveness of human and nature rights for fair and equitable ecosystem governance, as well as a model

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<sup>83</sup> Ferrarese, M.R. (2011). Diritto globale e "dislocazioni" giuridiche. A partire da un volume di S. Cassese. *Politica del Diritto*, 42(3), 379-394.

<sup>84</sup> See fn. 5.

<sup>85</sup> For a critical approach to the Paris Agreement and the Agenda 2030 see Sharma, N. (2020). Introduction: A Commitment to Sustainable Development Through Intercultural Perspectives. In *Value-Creating Global Citizenship Education for Sustainable Development* (pp. 1-23). Palgrave Macmillan.

<sup>86</sup> Brandi, C., Dzebo, A., & Janetschek, H. (2017). *The case for connecting the implementation of the Paris Climate Agreement and the 2030 Agenda for Sustainable Development*. Briefing Paper No. 21. German Development Institute.

of inspiration for the protection of human and nature rights.<sup>87</sup> This demands strengthening the principle of responsibility of human beings to preserve the natural cycles of nature and to recognize their relevance.<sup>88</sup>

In sum, this contribution is applying a global approach to environmental law hinging from the main teachings of GAL, and critically looking into the most advanced achievements in the environmental and climate regulatory framework, by suggesting enhancements of rights-based and nature-based approaches. Such a perspective is expected to foster integrated approaches capable of institutionalizing effective counter-balances to the expansive dominion of some societal systems over others (especially of Western approaches over Indigenous and local communities). A global approach to law inspired by GAL and based on integration, participation, and inclusiveness provides a platform to explore the integration of legal approaches and methods, in the field of environmental decision making and environmental protection. Most importantly, a global approach to law allows reading the human and non-human-related challenges through the lens of an integral concept of ecology and health, of rights of the planet and its inhabitants, and of collective duties to respect both.<sup>89</sup>

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<sup>87</sup> Acosta, A. (2017). Living Well: ideas for reinventing the future. *Third World Quarterly*, 38(12), 2600-2616; Kothari, A., Salleh, A., Escobar, A., Demaria, F., & Acosta, A. (2019). *Pluriverse. A Post-Development Dictionary*. New Delhi. Tulika Books.

<sup>88</sup> Jonas, H. (1976). Responsibility today: the ethics of an endangered future. *Social Research*, 77-97; Jonas, H. (1981). The concept of responsibility: An inquiry into the foundations of an ethics for our age. In *The Roots of Ethics* (pp. 45-74). Springer; Acosta, A., & Abarca, M.M. (2018). Buen Vivir: An alternative perspective from the peoples of the global south to the crisis of capitalist modernity. *The climate crisis. South African and global democratic eco-socialist alternatives*, 131-147. For the reflections of the buen vivir on European law see Baldin, S. (2015). La tradizione giuridica contro-egemonica in Ecuador e Bolivia. *Boletín Mexicano de Derecho Comparado*, 48(143), 483-530; Baldin, S., & Zago, M. (2014). *Le sfide della sostenibilità. Il buen vivir andino dalla prospettiva europea* (pp. 1-413). Filodiritto Editore.

<sup>89</sup> Pope Francis. (2015). *Laudato Si': Encyclical letter on care of our common house*. Libreria Editrice Vaticana; O'Neill, E. (2016). The Pope and the environment: Towards an integral ecology?. *Environmental Politics*, 25(4), 749-754; Sadowski, R.F. (2016). The Concept of Integral Ecology in the Encyclical Laudato Si'. *Divyadaan Journal of Philosophy and Education*, 27(1), 21-44.; Capra, F., Mattei, U. (2015). *The ecology of law: Toward a legal system in tune with nature and community*. Berrett-Koehler Publishers; Sajeve, G. (2018). *When Rights Embrace Responsibilities: Biocultural Rights and the Conservation of Environment*. Oxford University Press; Zimmerman, M.E. (2005). Integral ecology: A perspectival, developmental, and coordinating approach to environmental problems. *World Futures*, 61(1-2), 50-62; Esbjorn-Hargens, S., & Zimmerman, M.E. (2011). *Integral ecology: Uniting multiple perspectives on the natural world*. Shambhala Publications.

## 6. Case Studies on Water Governance

The research on participation will narrow in on some case studies of environmental governance applied to water, spurred by the realization that water plays a key role in our existence, and stimulated by some virtuous practices of interconnectivity and participatory practices from water communities around the world. In particular, the analysis will focus on the cases of participation in the Arctic Region to broaden the discourse to ocean-centered models of participation.<sup>90</sup> The examples drawn from the selected case studies will raise the question of how it is possible to model a water-centered system based on an effective involvement of all the interested parties.<sup>91</sup> In the Arctic region, the interplay between regional and global regimes, systems of knowledge and actors, provides best practice examples of participatory environmental governance applied to land-and-sea (with the interconnector of the sea-ice) and potentially extensible beyond it.<sup>92</sup> Similarly, the experience drawn from the evolution of the ocean governance system shows important developments toward the expansion of the actors involved in decision-making, as well as the progressive amplification of nature's rights and the recognition of legal personality to the oceans.<sup>93</sup>

As hinted, the relevance of water governance to epitomize environmental governance is self-evident for the crucial role that water plays in the planet's life.<sup>94</sup> Water is the most essential element for life on Earth, acting as a powerful medium for living beings and places.<sup>95</sup> For this reason, it is of utmost importance that participation is placed at the forefront of any ecologically inte-

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<sup>90</sup> Lohse, E.J., & Poto, M.P. (Eds). (2017), *Best practices for the protection of water by law. Focus on participatory instruments in environmental law and policies*, Berliner Wissenschafts-Verlag.

<sup>91</sup> Maes, J., & Jacobs, S. (2017). Nature-based solutions for Europe's sustainable development. *Conservation letters*, 10(1), 121-124; Cohen-Shacham, E., Walters, G., Janzen, C., & Maginnis, S. (2016). Nature-based solutions to address global societal challenges. *IUCN*, 97; Nesshöver, C., Assmuth, T., Irvine, K.N., Rusch, G.M., Waylen, K.A., Delbaere, B., & Wittmer, H. (2017). *The science, policy and practice of nature-based solutions: An interdisciplinary perspective. Science of the total environment*, 579, 1215-1227.

<sup>92</sup> Stokke, O.S. (2009). Protecting the Arctic environment: The interplay of global and regional regimes. *The Yearbook of Polar Law Online*, 1(1), 349-369.

<sup>93</sup> See respectively Chapters III and IV.

<sup>94</sup> Kuylenstierna, J.L., Björklund, G., & Najlis, P. (1997). Sustainable water future with global implications: everyone's responsibility. *Natural Resources Forum*, 21(3), 181-190. Blackwell Publishing Ltd.

<sup>95</sup> Connor, R., & Stoddard, H. (2012). Recognizing the centrality of water and its global dimensions. *WWAP (World Water Assessment Programme). The United Nations World Water Development Report*, 4, 22-42; Balaji, R., Connor, R., Glennie, P., Van der Gun, J., Lloyd, G.J., & Young, G. (2012). The water resource: variability, vulnerability and uncertainty. *WWAP (World Water Assessment Programme). The United Nations World Water Development Report*, 4, 77-100.