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LAW AND RECOGNITION OF CONSTITUTIONAL LEGAL PERSONALITY OF FORESTS: A FEW REMARKS ON FUNDAMENTAL PRINCIPLES AND VALUES

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Abstract. The legal subsumption of biosphere processes necessitates recognition of the fact that the timescales on which nature reproduces itself are disparate from those of human life and societies. Additionally, nature exhibits variations in conformity across space. In the face of these challenges, the law must be able to integrate the aspects of complexity that characterize the construction of legal systems, the conception of fundamental rights, and the foundational values of legal systems with the facets fundamental to nature's welfare. Therefore, due to the ambiguous nature of granting legal subjectivity and associated rights to nature, which could impede social inclusion and diversity, the author suggests granting constitutional legal personality to forests. This would enable precise definition and the application of established legal and managerial knowledge for the conservation of nature.

Keywords: legal subsumption of biosphere; constitutional protection of nature; legal personality of forests

1. INTRODUCTION: PROTECTION OF NATURE AND CONSTITUTIONAL PERSONALITY OF FORESTS

This brief contribution aims to further explore the issue of recognizing the legal personality of forests in the constitution, a proposal that I have recently presented on various fora [Policastro 2022-2023; Idem 2023]. Initiatives aimed at recognizing the legal personality of nature and its rights are multiplying. These trends reflect both a legal perspective seeking to transcend the instrumental view of the surrounding world as merely serving human interests and, in various cases, asserting new concepts, such as indigenous or native peoples' perspectives, which aim to recognize the deep connections between nature and human beings.



As early as the United Nations Declaration of 1992, the World Charter for Nature¹ emphasized that humanity derives from nature and that by caring for nature, it will bestow its gifts in return. The Stockholm Declaration of 1982² also sought to promote a heightened awareness of the relationship between human societies and nature. In this contribution, we will primarily examine how the legal personality of forests can consistently address the development of a conscious symbiosis between humanity and the biosphere.

2. PROTECTION OF THE BIOSPHERE, FOUNDATIONS OF LAW, AND COMPLEMENTARY KNOWLEDGE

The intense debate unfolding in many countries regarding nature's rights or its components has garnered significant interest within the field of legal science.³ The legal recognition of nature and its rights occurs both in its entirety and in relation to specific areas, considered in terms of their spiritual, cultural, and ecosystemic identity. The interest in protecting nature as a whole or in relation to its parts or ecosystems is undoubtedly justified given the growing concerns about the preservation of the state of the Biosphere, understood as the space where life, including that of human beings and their societies, manifests itself. These concerns united, among others, scientific research, theological and literary reflections [Vernadsky 1926; Idem 1945; Le Guin 1972; Lovelock 1979; Margulis 1998; Powers 2018].⁴

The complexity of the subject is linked to the need to protect life from both a cosmic perspective, i.e., planetary,⁵ and a social perspective, i.e., in the context of the relationships between different cultures and the various institutional and organizational models through which humans act.⁶ Law

¹ UNO General Assembly, World Charter for Nature, 48th Plenary Meeting 28th October 1982, A RES 37/7 ENG.

² UNO, Declaration of The United Nations Conference on The Human Environment, Report of The United Nations Conference on The Human Environment, Stockholm, 546 June 1972, A/Conf 18/14/Rev. 1, United Nations Publications, New York 1973.

³ "A search on 'derechos de la naturaleza' and 'rights of nature' in Google Scholar yields 21,100 publications on the subject in Spanish and 15,800 in English. In HeinOnline, 2,079 texts appear when searching for the words 'rights of nature', and in JSTOR 555 articles appear when entering these same words in the search engine. Over the last fifteen years, a network of scholars studying these rights has developed, and the corresponding body of scholarship is profoundly heterogeneous" [Bonilla Maldonado 2023, 42].

⁴ See Franciscus PP., Littera encyclica *Laudato si*' de communi domo colenda, AAS 107 (2015), p. 847-945.

⁵ "To a great extent, exogenous cosmic forces shape the face of the Earth, and as a result, the biosphere differs historically from other parts of the planet. This biosphere plays an extraordinary planetary role" [Vernadsky 1997-1998, 44].

⁶ Luhmann's call for communication beyond individual perspectives is indicative in this

plays a key role in this regard. Indeed, the law is not only constructed to facilitate communication among diverse individuals and societies but, in attempting to resolve the issues stemming from different legal relationships,⁷ it is called upon to engage with an increasingly diverse range of sciences and knowledge.

When these sciences and knowledge aim to underpin legal reasoning, they function as metatheories of the law. Conversely, when they support legal reasoning by providing elements derived from their respective fields of inquiry, they serve as complementary theories of the law.⁸ Moral knowledge, i.e., ethical values, and wisdom knowledge, i.e., those through which different cultures represent and interact with natural phenomena, can also be utilized as complementary theories to legal knowledge or as theories that allow for the establishment of legal knowledge itself (namely as metatheories). Furthermore, the various conceptions of law as a product of civilization⁹ can

regard [Luhmann 1986, 142]. "We must therefore ask the question, whether, [...] an ethics that abstains from paradox will develop and be able to be practiced with moral responsibility. This could give us pause to wonder whether it is not the recognition of paradox that is the way for ethics to go [...]. If anywhere, it is in ecological communication that society places itself in question [...]." See to this regard the reflections stemming from: Franciscus PP., Littera encyclica *Fratres omnes* de fraternitate et sociali amicitia, AAS 112 (2020), 969-1074.

⁷ Indeed, see Policastro 2010a, 55-56: "legal knowledge can be expressed only through language. The way in which languages develop their semantic contents depends very much on the historical background of the interpreters, on the history of thought and the challenges that the societies that make use of a given language went through" through highly inductive processes. "In this approach, language may be seen not only with respect to a creative function, an information function and a memory function as Lotman pointed out. This aspect ought to be seen also in connection with the past experience deriving from a community and its interaction with other communities, that includes language and culture. Last but not least there is the interaction between the deep consciousness of the individual, For this reason the relationship between conventional and symbolic meaning of linguistic expressions, appears not univocal. On the contrary it yields a plurality of solutions that cannot be considered without an adequate approach to complexity." Lotman paved this way to approach the problem, writing [Lotman 1990, 12-13]: "For a fairly complex message to be received with absolute identity, conditions are required which in naturally occurring situations are practically unsustainable [...] languages have functions, which are inherent to them in the natural state". Including the reflection on the different aspects concerning our life, and in particular of our life within nature appeared to us thus, a reasonable approach to improve the awareness of the communication. Scholars such as Vernadsky and Lovelock encourage us to do so.

⁸ "the use of complementary theories will be an element of our legal justification. It will be compounded, through our use of the meta-theories as an hypertext, which is itself not a theory but that permits to bridge up between our complementary theories, and our object theory of law" [Policastro 2012, 190].

⁹ Concerning the conceptions of law in relation to civilization we have the conception of the historian Arnold Toynbee [Toynbee 1954, 217] that "In their unanimous repudiation

also serve to underpin and integrate legal reasoning, taking into account various issues and circumstances.

In the face of fundamental global issues, such as the protection of the Biosphere and nature, human dignity, rooted in our biological existence, becomes the reference value.¹⁰ This calls for a dialogue that entails complete acceptance of the other and likely incorporates the postulates of Niklas Luhmann regarding the ethics of ecological communication. On the other hand, dialogue is both necessary and creative, as different views of law characterize each community and society, including the question of deeply rooted customs and ways of life, which should be viewed as substantive constitutions. Therefore, dialogue among various ways of life requires not only consideration of their general relationship with culture, society, and history but also a close examination of all the structures that give rise to their substantive

¹⁰ According with our research [Policastro 2010b, 624]: "Dignity acquires significant meaning as a value. First, because with its help, we can seek universal traits of humanity as a whole, regardless of the legal system of the state in which the individual lives and the legal categories that pertain to them. Second, because framing dignity as a value allows us to attribute distinguishing features to it compared to legal principles. In relation to what has been said, we can establish connections between the concepts of legal norm, legal principle, and legal value with the intellectual activities that individuals undertake when conceiving the legal reality. Third, because human dignity enables us to consider the correlations between legal systems, which are becoming increasingly important." Furthermore [Policastro 2010c, 2670], writes: "The trend towards the development of a law of interdependencies," which is intensifying due to the growing interest in the relationship between nature (the Biosphere) and human beings, this law "appears useful for researching the existential manifestations of the human person in order to determine the appropriate legal mechanisms for their protection."

of a belief in a 'Law of God*, all Iate Modern Western minds alike had been making the unwarrantably overweening assumption that they had a deeper insight into the secret of the Universe than the Prophets [...] and these seers' Christian and Muslim epigoni [...]. In their sectarian repudiation of a belief in 'laws of Nature' as well, the antinomian school of Late Modern Western historians had been making a still more overweening assumption that was even more unwarrantable." The jurist Hans Kelsen had a diametrically opposite perspective [Kelsen 1943, 265-67]: "With the emancipation of causality from retribution and of the law of nature from the social norm, nature and society prove to be two entirely different systems [...]. Hence there is no longer room for a natural behind or above a positive legal order. The dualism of nature and society is replaced by that of reality and ideology." Within this debate, thus, the position of the sociologist Niklas Luhmann on ecological communication stresses that [Luhmann 1986, 265] "But if anywhere it is ecological communication that society places itself in question, and we cannot see how ethics can dispense with this and remain available as something that can be relied on." This statement and the one of the scientist James Lovelock [Lovelock 1979, 130] "A more promising solution of the problems we have created [...] is a honest recognition of our dependence on technology and an attempt to select only those parts of it which are seemly and in their demands on planetary resources" call perhaps for a new civilization approach to our life in common. To this aim, the Encyclicals of Pope Francis Laudato si' and Fratelli tutti appear especially important.

constitution. Among these structures are the aims of societies, the principles governing the distribution of influence in society, the economy, and collective decision-making. They also encompass those related to the perception of law and its implementation.¹¹

When we examine these relationships from the perspective of different subjects and institutions, we observe the presence of numerous complex relationships that can pose obstacles to full ecological communication. However, precisely these complexities can be very useful for the evaluation and selection of legal instruments. In fact, if we want to think about ecological communication effectively, we must also consider the use of legal institutions that are suitable for sharing and defining the object of protection clearly. So far, the legal institutions that have been used for the protection of nature include constitutional principles, constitutional or fundamental rights, other constitutional norms, norms establishing specialized organizations, ordinary laws or administrative acts. In addition to these, we must consider the practices adopted by constitutions and communities, as well as the principles and declarations of international law.

3. THE RELATIONSHIP BETWEEN HUMAN SOCIETIES AND THE BIOSPHERE, THE IMPORTANCE OF FORESTS AND THE DUTIES OF PROTECTION ARISING FROM THE INCORPORATION OF THESE APPROACHES INTO THE LEGAL FRAMEWORK

As our concern revolves around the relationship between human societies and nature, we must base our discourse on what we currently understand about nature, particularly the Biosphere. Nearly 100 years ago, Vernadsky,

¹¹ We can see the development of the approach in the range of studies we developed between 2010 and the present moment. In [Policastro 2010a, 21] we write: "For this reason constitutionalism embodies a rule of exercise of the political problem, that whenever applied to concrete cases, produces different substantive constitutional relations, that is the patterns of distribution of the influences: a) on the political sphere, b) on the social sphere, and c) on the economic sphere. Such enactments and such rules of distribution tend to produce a legal order with specific features for the life of the individual subjects and for the relations with the other communities". We follow then [Policastro 2020, 362-63] with: "notwithstanding [...] differences of the ways in which we live in common and relate to nature, constitutional law [...] is characterised by three classes of elements [...]: 1) [...] aims of each society, the conditions in which it constituted, the problems it wanted to avoid or overcome by setting a form of life in common; 2) [...] three kinds (subclasses) of principles and norms: (i) - the ones that indicate [...] how the relations between the different parts of society take place; (ii) - [...] in which way the decisions on the common issues may take place; (iii) - [...] the relations through which resources and goods needed to conduct life are gathered and produced, and [...] distributed; 3) a third class of rules, concerns how law determines its range of action [...]."

in a landmark work, emphasized that ancient cultures that considered the Sun to be a common ancestor were closer to the truth than one might think.¹² Lynn Margulis, on the other hand, pointed out that life is a cosmic phenomenon, and that symbiosis, hence the systemic coherence of the Biosphere, was the result of the activities of all primary living organisms forming the basis of life on Earth.¹³ Both of these analyses address the ethical problem in a very general way, transcending subjective and cultural assessments: given that life is an immanent characteristic of our planet and its condition in the Cosmos, surpassing our creative possibilities, we must act to preserve it.

James Lovelock further adds that human beings' self-awareness and their ability to exchange information should be useful for a collective effort.¹⁴ We need to overcome fragmentation through our ability to choose. This brings to mind Pico della Mirandola, who expressed Renaissance thought by stating that the dignity of man lies in their freedom, which is the ability to choose.¹⁵ This means that the capacity to choose is inextricably linked to each individual, and this implies that pluralism in choices is recognized as a characteristic of being human.

¹² "Ancient religious intuitions that considered terrestrial creatures, especially man, to be children of the sun were far nearer the truth than is thought by those who see earthly beings simply as ephemeral creations arising from blind and accidental interplay of matter and forces. Creatures on Earth are the fruit of extended, complex processes, and are an essential part of a harmonious cosmic mechanism, in which it is known that fixed laws apply and chance does not exist" [Vernadsky 1987-1988, 44].

¹³ L. Margulis writes: "Life is an incredibly complex interdependence of nature and energy among millions of species beyond (and within) our own skin. These Earth aliens are our relatives, our ancestors and part of us. They cycle our matter and bring us water and food. Without 'the other' we do not survive. Our symbiotic, interactive, interdependent past is connected through animated waters" [Margulis 1998, 110].

¹⁴ See Lovelock 1979, 126: "The remarkable success of our species derives from its capacity to collect, compare, and establish the answer to environmental questions, thus accumulating what is sometimes called conventional or tribal wisdom. [...] this wisdom has now become a bewildering mass of stored information. In a small tribal group still leaving in its natural habitat, [...] where conventional wisdom and Gaian optimization conflict, the discrepancy is rapidly seen and the correction made...As society became more urbanized, the proportion of information flow from biosphere [...] decreased [...]. At the same time the complex interactions within the cities produced new problems...their solutions [were] stored [...]."

¹⁵ See the reference to Pico della Mirandola "De Hominis Dignitate" in Policastro 2010b, 613: 23. "Poteris in inferiora qui sunt bruta degenerare; poteris in superiora qui sunt divina ex tui animi sententia regenerari" (You can degenerate into lower things, which are brutish; you can regenerate into higher things, which are divine, according to your own judgment of the mind). Furthermore see Policastro 2010b, 648-49: "The dignity of man, emphasizing its existential aspect, creates a basis for the comprehensive interpretation of human dignity together with values such as freedom, equality, and the rule of law."

Therefore, what James Lovelock envisions – a coherent action by all of humanity aimed at caring for the balances of Gaia, Mother Earth – must first and foremost be consistent with the decisions of each individual. This coherence must be able to make use of all the substances and entities of the Biosphere, including those generated by anthropic processes, by anticipating how to use them in a way that preserves its equilibrium. These substances and flows should be regarded as opportunities and should therefore be considered within a prediction framework that allows for their sustainable use.

The aspects mentioned above should be taken seriously. Indeed, the Biosphere's primary characteristic is its attempt to maintain stable conditions for all living species over time.¹⁶ Nevertheless, mass extinctions that have occurred during the planet's evolution have seen new species replace others with the transformation of planetary living conditions.

Therefore, even though the Biosphere has shown its capacity for renewal, the contribution of societies to preserving homeostasis is crucial, especially given that scientific literature suggests we are approaching a sixth mass extinction.¹⁷ In this regard, Vladimir Vernadsky already observed in 1926 that humans had made a significant alteration to the vegetal covering of the earth through the drastic reduction of forested areas. Vernadsky added that, in 1926 the effects of this depletion of the Biosphere were incalculable. However, nearly 100 years later, the opinion of authoritative scholars in the field of global forest evolution is that the best remedy to address the climate crisis is to increase the surface area of trees. Nevertheless, the method to achieve this remains to be identified. We simply want to note that human actions directed towards preserving homeostasis in the current state of the Biosphere equate to ensuring the adequate survival of the human species. This means that acting to protect or refrain from causing harm to life, freedom, personal integrity, or the property of another [Locke, II, Chap. II, 7] is an essential duty for individuals, communities, and institutions. The state of the Biosphere in which our life has developed is the starting point, or the state of nature, for every human society. Therefore, faced with the current state

¹⁶ See "The most important property for Gaia is the tendency to keep constant conditions for all terrestrial life" [Lovelock 1979, 119].

¹⁷ See: "Our examination of existing data in these contexts raises two important points. First, the recent loss of species is dramatic and serious but does not yet qualify as a mass extinction [...] that there is still much of the world's biodiversity left to save, but daunting that doing so will require the reversal of many dire and escalating threats. The second point is particularly important. There are clear indications that losing species now in the 'critically endangered' category would propel the world to a state of mass extinction that has previously been seen only five times in about 540 million years. Additional losses of species in the 'endangered' and 'vulnerable' categories could accomplish the sixth mass extinction in just a few centuries" [Barnosky et al. 2011, 56].

of the Biosphere, protection through criminal law for actions or omissions that harm its equilibrium, or that prejudice the conditions of individuals due to climate change itself (of course, with the corresponding safeguards), must be considered admissible. Furthermore, the relationship between human societies and nature must be understood as part of the limitation of political power and, consequently, constitutionalism.

4. PLURALISM AND LAW: TIME, SPACE, AND COMPLEXITY IN BIOSPHERE PROTECTION

As we have seen, Lovelock calls upon societies and human communities to develop a coherent action within a pluralistic context, through consciousness and communication. It should be emphasized that in addressing the need for states to develop a cooperative approach to caring for the Biosphere, the recognition of broad pluralism is necessary [Policastro 2015]. Pluralism is also considered necessary in the development of the institutions through which the protection of nature is pursued in various legal experiences. Therefore, different concepts of "rights", for example, in the protection of the rights of nature, appear not only plausible but necessary.¹⁸

More generally, in the long debate over Ronald Dworkin's thesis that in difficult cases, through a judge particularly endowed with cognitive and interpretative skills, only one correct solution can be reached, new views appeared.¹⁹ One of them has been purported by Michel Rosenfeld

¹⁸ D. Bonilla Maldonado underlines: "Legal pluralism offers a set of conceptual lenses through which to [...] evaluate the heterogeneity of normative systems that exist [...] as well as their interactions. This heterogeneity, [...] challenges the assumptions underlying the legal monism that is dominant in modern law whereby states have (and should have) an autonomous, [...] legal order that reflects the ethos of the nation. The rights of nature have created a form of external legal pluralism [...][they] are legal products that have emerged in peripheral national legal systems and that have influenced and partially transformed international law" [Bonilla Maldonado 2023, 1]. He adds: "The rights of nature are not a tool to promote or consolidate weak legal pluralism ... They are not a means to complicate the rule of recognition [...] and accept authorities from minority cultures as a source of law, a source that will generate rules and principles applied solely within the territories they govern [...] the rights of nature, like the "Virgen-Cerro", are also innovative and subversive. Indigenous cultures represent a valuable source of legal knowledge creation [...] and artistic wisdom. Historically, these cultures have been regarded by the dominant modern culture as minor and exotic forms of knowledge" [Bonilla Maldonado 2022, 84-85]. These statements reveal an approach quite opposite with respect to the one of Kelsen [Kelsen 1943].

¹⁹ Namely the solution of judge Hercules, who "must consider a scheme of abstract and concrete principles that provides a coherent justification for all common law precedents and, so far as these are to be justified as principle, constitutional and statutory provisions as well" [Dworkin 1977, 117]. He added, however, that "Hercules technique of adjudication [...] serves a reminder to any judge [...] that he should decide hard cases with humility"

in favor of "comprehensive pluralism."²⁰ It is also important to consider that from a philosophical perspective, the pluralist principle is widely advocated in reference to the interaction between ways of life.²¹

4.1. Law, time, and nature

To address the issue of using legal tools to care for the common home, or the Biosphere, we must consider that the law operates in three dimensions: time, space, and complexity. Time is a crucial factor, especially in the relationship between humanity and nature. The emergence of forests has played a significant role in shaping the current conditions of the Biosphere.²² Therefore, maintaining adequate forest coverage (contributing at the same time to the needs of wood as raw material) should be regarded as a fundamental constitutional obligation linked to sovereignty over natural resources.²³

[[]ibid., 30].

²⁰ "In societies such as the typical of Western constitutional democracies in which the citizenry divides among several competing conceptions of the good – i.e. societies that are 'pluralistic in fact' the best way to fulfill the demands of equal concern and respect principle is arguably through adoption of 'pluralism-as-norm' or in other words, through commitment to 'comprehensive pluralism' which "must mediate between conceptions of the good and seek to insure that pursuit of any such conception should not frustrate the opportunity to pursue other such conceptions" [Rosenfeld 2005, 389].

²¹ "The plurality of worldviews in which a human being normally lives and endures all existential threats is therefore only meaningful if it signifies the rationale of its own pluralism. The rationale of pluralism is the internal complexity of existence, above all, the fundamental complexity without which other complexities would not be real, the complexity of Essence and Being, constituting the adventure of existence, which is contrary to the external reason of being. Like the Absolute, the First Being, it exists on its own through an absolute internal complexity, like 'existential parts]" [Krapiec 1986, 74].

²² "The rise of land plants, which became well established during the Devonian Period (419-359 million years ago), is a key episode in the history of life. The evolution of moderate to large sized plants had profound influence on many aspects of the Earth system, including atmospheric composition, the hydrological cycle, sediment transport and the nature of the sedimentary rock record, and albedo and global temperatures – arguably creating the modern Earth" [Berry 2019, 792].

²³ However, according with Anna Stilz [Stilz 2019, on-line abstract]: "The proposed [...] principle is [...] a right to control resource management decisions. By investigating the case of forest conservation, the chapter also argues that in the case of certain global systemic resources, resource sovereignty should be constrained by duties of environmental justice that require cooperation in international institutions." Instead Nico Schrijver points out: that the Forestry Statement of the 1992 UN Conference on Environment and Development reaffirms the "permanent sovereignty over all types of forests", and provides that their "sound management and conservation [are] of concern to the Governments of the countries to which they belong and are of value to local communities and to the environment as a whole" [389]. Here it emerges that international law does not neglect the importance of forestry management for the protection and the use of natural resources.

On the other hand, the development and sustainable management of natural resources occur over a timespan much broader than human life. Thus, linking decisions about natural resource management to decision-making processes driven by electoral majorities seems inappropriate. Balancing the interests at stake may not adequately consider the relationship between society's immediate expectations and symbiosis with nature. In this field also the judiciary may find difficulties, which call for an approach based on humility [Dworkin 1977, 130].²⁴ A sociological aspect arises here: the need to integrate the governance process regarding the relationship between society and nature with institutions capable of accounting for the temporal dimension of nature and taking responsibility for it.

Therefore, entities akin to defenders of nature's rights may seem generally to show contingent interests in nature protection but lack the hands-on experience and knowledge to envision the orderly development of human societies in symbiosis with nature. Greater interest lies in institutions with centuries of experience in observing nature, whether they are a spontaneous product of society, as in the case of indigenous nations traditionally caring for forests and biodiversity, or institutions like the Polish State Forests, born from the confluence of social awareness of the importance of natural resources and the scientific reflection and technological applications characteristic of Polish society [Policastro 2022-2023, *passim*].

An important issue concerning time and natural resources is that forest growth requires much more time than the professional lifespan of foresters or the populations that care for them. The transfer of information in this regard is crucial. The formulation of plans serves this purpose. They are essential both in cases where it is necessary to reforest areas that have been completely deforested and in cases where forests need to be managed to improve biodiversity and ecological values. Achieving adequate results takes many years, and the results must be planned and constantly evaluated for each forest. Therefore, decade-long coordination laws rather than national plans may be important for this purpose.

4.2. Space, nature, and law

The Biosphere is not homogeneous. Each place has its own specificity and characteristics. Moreover, every population living in a particular

²⁴ Indeed: "The trial has taken on a new role in the environmental field. [...] The judge plays an essential role in cases related to soil, water, air pollution, waste, or various oil spills. Furthermore, the trial has become a platform for political expression by civil society, particularly by NGOs, [...] However, environmental disputes [...] have a specific, collective, complex, and sometimes transnational nature that challenges the trial's ability to contribute to the enforcement of environmental law" [Hautereau-Boutonnet 2020, 9].

territory has its own peculiarities. For this reason, the relationship between law and space is fundamental and constitutes a constituent element of the pluralist principle. Societies and human communities, by settling in various places, have developed their own cultures and also their relationship with nature. American poet Walt Whitman sang the wonder of the American citizen in the face of the wonders of nature,²⁵ calling for the use of "nature itself for freedom and democracy. Storytellers like Woody Guthrie ("This Land is Your Land")²⁶ or Lee Marvin ("I Was Born Under a Wandering Star")²⁷ follow this trend, in which there is no thought for the primary nations that were practically exterminated. Instead, more recently, Ursula K. Le Guin, with a different and more updated experience of the relationship between American society, space, and nature, described the lost relationship with nature: "The Word for World is Forest" [Le Guin 1972].²⁸ Moving on to other examples, the populations of the Amazon and other indigenous populations represent themselves as dedicated to preserving the specific biodiversity of their areas, trying in various ways to assert this role.²⁹ We can also observe that in those countries where there has been a distinction between material and immaterial function of nature, the space of nature has been in many cases put at serious risk by its appropriation for the purpose of real estate development. [Saint Marc 1967, 322-26]. In Poland instead, joining the productive, the ecologic and the social function of the forests is a serious obstacle for the instrumentalization of the forests as space of life.³⁰

²⁵ "In the poetry of Walt Whitman, nature is, on one hand, a spiritualized, orderly, and perfect mother, a cosmic force that manifests itself in various and diverse ways, and a whole composed of interdependent and interconnected parts. On the other hand, it is an instrument for the materialization of a particular political project: modern democracy in the New World" [Bonilla Maldonado 2022, 96]. The author however seems not to take into account that this new conception of nature is the outcome of the violent superposition of white colonizers over the original nations. See Whitman 1885, *passim*.

²⁶ See https://www.woodyguthrie.org/Lyrics/This_Land.htm [accessed: 15.09.2023].

²⁷ See https://www.justsomelyrics.com/1364273/lee-marvin-i-was-born-under-a-wandering-starlyrics.html [accessed: 15.09.2023].

²⁸ The novel is the story of the colonization of a distant planet and the local populations, members of a people who identified their lives with the forest: "But to the Athsheans soil, ground, earth was not that to which the dead return and by which the living live: the substance of their world was not earth, but forest. Terran man was clay, red dust. Athshean man was branch and root. They did not carve figures of themselves in stone, only in wood" (from Chapter 5).

²⁹ As Melubo stresses: "despite the external pressures to dismantle Maasai ecological strategies and practices through imported religions, Western-oriented education, constraining policies, and the cumulative loss of land, the community has continued to maintain significant practices for the conservation of Tanzania's wildlife ecosystems and livestock [...] indigenous practices are central to a continued nurturing of biodiversity conservation" [Melubo 2020, 180].

³⁰ Article 6(1a) of the Act of 28 September 1991 on forests, Journal of Laws of 2023, item

The Polish approach to forests is based on a decentralized planning approach, the implementation of which is the responsibility of the local forest superintendent.³¹ The implementation of this approach takes place through the division of the national territory into forest regions and districts,³² and these are then divided into as many forest units managed by a person in charge. The first result of this division and distribution of related responsibilities is the production of different networks. The first network connects natural elements with each other. In fact, the territory of each forest unit is divided into numbered parcels, each of which is considered in its natural identity, both in the formation and in the implementation of the plan. Each of these parcels has access to water and access to fire prevention interventions. On the other hand, the responsibility of each forest district for initiating and executing the plan (which is drawn up by an independent technical authority) supports solidarity mechanisms, first and foremost the fire prevention network, which includes a permanent national surveillance network and a network of dedicated and active airports. In this way, despite the increasing wildfires due to climate change and increasing soil aridity, the relationship between the management of Polish forests and space allows for rapid response to wildfires. This leads to a very low incidence of wildfires, which in Poland are measured in hectares. It should be noted that the conservation of the coppice biome that takes place through this constant activity of monitoring and localized care for increasing biodiversity is a manifestation of global solidarity. Polish forests cover an area of just under one seventieth of the Amazon, so care extended over them has a general global importance, even for the green mantle covering the Earth.

Another solidarity element that emerges from the Polish model of forest management is that the decentralized responsibilities for managing them have led to the development of a forest fund that allows for intervention in cases of particular difficulties arising in different forest districts with specific needs. On the other hand, from the perspective of the relationship

^{1356 [}hereinafter: LF], states: "Sustainable forest management – activity aimed at shaping the structure of forests and their use in a manner and at a pace ensuring the sustainable preservation of their biological richness, high productivity, regenerative potential, vitality, and the ability to fulfill, now and in the future, all important protective, economic, and social functions at the local, national, and global levels, without harm to other ecosystems." Article 7 states: "Sustainable forest management shall be conducted according to a forest management plan or a simplified forest management plan."

³¹ "The forest supervisor independently conducts forest management in the forest district based on the forest management plan and is responsible for the condition of the forest" (Article 35(1) LF).

³² Please refer to the map of the division of forests in Poland into forest districts: https://www. bdl.lasy.gov.pl/portal/mapy?t=0&ll=19.412949,52.001221&scale=4622324&map=0,0.7&layers= 0,1,2,3,4,5,8,9,10,11,12,14,15,16,17&basemap=2&extwms=&hist= [accessed: 15.09.2023].

between nature and society, an important networking aspect is found in forest education. The Polish approach to nature management has, for almost two centuries now, placed great importance on forest education. Technical forestry institutes are now organized in a network throughout the national territory. Studies conclude with graduation, and students can then access forestry studies, which are also widely distributed across the country.

The sovereignty model that emerges from the decentralized model of Polish forest management is therefore a model based on the care of every part of the territory according to its natural vocations. The sustainability of this model, understood broadly as not only capable of being locally supported but also adopted in other places, is based on the symbiotic characteristics of the model.³³ In fact, forestry practice has developed over time an approach that is based on the inseparable union of the productive, ecological, and social functions of forests. This approach, emphasized in the Polish specialized press on forests, constitutes, precisely because of its decentralized approach, an evolution distinct from the German sustainability approach, supported primarily by Carlowitz and then developed by Cotta, Hartwig, and others [Policastro 2021-2022, III, 108-109 passim].

The fact that the Polish legislative approach to forest management adopted in Poland is a reflection of the country's longstanding forestry practices adds a significant layer of interest, particularly concerning its alignment with the implementation of the Rio Convention on Biodiversity.³⁴ Indeed, the Convention has underscored the significance of ecosystems [Policastro 2021-2022 V, 21-40], and its subsequent efforts have further refined the concept of ecosystem-based management.³⁵ This ecosystem approach is also mentioned in the German forest framework [Häusler and Scherer 2002, 5-8], which acknowledges the forest's multifaceted roles encompassing productivity, ecology, and certain social functions.³⁶

³³ "1. The increase of forest resources occurs through afforestation of lands and the enhancement of forest productivity as specified in the forest management plan. 2. Afforestation may include unused lands, non-arable agricultural lands, agriculturally unused lands, and other lands suitable for afforestation, especially: 1) Lands located near river or stream sources, on watersheds, along riverbanks, and on the shores of lakes and reservoirs; 2) Volatile sands and sandy dunes; 3) Steep slopes, hillsides, cliffs, and depressions; 4) Spoil heaps and areas after the exploitation of sand, gravel, peat, and clay" (Article 14 LF).

³⁴ United Nations Treaty Collection, file name: Ch_XXVII_8, vol. 2, chapter XXVII. Environment, title: 8. Convention on biological diversity. Rio de Janeiro, 5 June 1992, in particular Article 2: "Ecosystem" means a dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit (Article 2. Use of terms).

³⁵ See Convention on Biological Diversity distr. general unep/cbd/cop/4/inf.9 20 march 1998, p. 3: report of the Workshop on the Ecosystem Approach, Lilongwe, Malawi, 26-28 January 1998.

³⁶ See the German "Forest Conservation and Forestry Promotion Act (Federal Forest Act).

The concept of ecosystem has a significant importance in the present process of recognising the rights of nature and its legal personhood.³⁷ Indeed, the concept of an ecosystem may be linked not only to compact spaces that encompass specific areas, such as a forest district or, for example, a river's course. It may involve much more complex fractal spaces. In this regard, in Colombia, the Mama,³⁸ interpreters and spokespeople for all of humanity of the knowledge and metaphysics of the Kogi nation, highlight the problems for the ecosystems of the mountains they live in due to the modification of the lower lagoons. They emphasize a general issue, namely the relationship between ecosystems and the alteration of water flows, which occurs when riverbanks or river mouths are modified. Therefore, addressing the issue of ecosystems requires their full discovery. The empirical knowledge of communities, individuals, and institutions dedicated to forest management and care can be of great importance here.

Research on and recognition of ecosystems in their mutual relationships require communication among multiple stakeholders, including those responsible for forest and nature care, those living in their vicinity, civil

BWaldG Date of promulgation: May 2, 1975. Section 1, Purpose of the Law: The purpose of this law is in particular: To preserve, and if necessary, increase the forest's proper management in a sustainable manner for its economic benefits (utility function) and its significance for the environment, especially for the continuous performance of the natural balance, climate, water management, air purity, soil fertility, landscape, agricultural and infrastructure, and the recreation of the population (protective and recreational function). To promote forestry. To achieve a balance between the interests of the public and the concerns of forest owners."

³⁷ For example see: New Zealand Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (20 March 2017 no. 7, version as at 30 November 2022): "[...] 12. Te Awa Tupua recognition. Te Awa Tupua is an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and metaphysical elements [...] 14. Te Awa Tupua declared to be legal person (1) Te Awa Tupua is a legal person and has all the rights, powers, duties, and liabilities of a legal person." Cfr. New Zealand Te Urewera Act 2014 (27 July 2014) no. 51, version as 28 October 2021 "[...] 3. Background to this Act. Te Urewera (1) Te Urewera is ancient and enduring, a fortress of nature, alive with history; its scenery is abundant with mystery, adventure, and remote beauty. (2) Te Urewera is a place of spiritual value, with its own mana and mauri. (3) Te Urewera has an identity in and of itself, inspiring people to commit to its care [...]. 11. Te Urewera declared to be legal entity. (1) Te Urewera is a legal entity, and has all the rights, powers, duties, and liabilities of a legal person." See https://www.legislation.govt.nz/act/public/2017/0007/ latest/whole.html#DLM6831458 [accessed: 15.09.2023]; https://www.legislation.govt.nz/act/ public/2014/0051/latest/whole.html#DLM6183705 [accessed: 15.09.2023].

³⁸ "The Kogi integrate the way of thinking into their total perception of the circle of life and water. The waters of life bind the Sierra together. They are very conscious that evaporation from the sea and the rain forest rises as a cloud, and is deposited again as rain, and as snow on the highest peaks [...] Visiting the sea is therefore a most important activity for the Mamas. It is important as visiting the mountain tops. In fact and the peaks are linked [...] both must be kept in harmony" [Ereira 1990, 200-201].

society, forest institutions, states, and organizations. Indeed, public awareness of interactions between ecosystems can become a fundamental point for protecting the biome and thus embrace areas beyond individual ecosystems. The various dimensions of the necessary dialogue for this purpose lead us to consider the complexity in the relationship between law, society, and nature on a global scale. In this context, we will develop our main thesis, which is to emphasize the importance of recognizing and ensuring legal personality for forests.

5. COMPLEXITY, NATURE, AND LAW

A fundamental characteristic of human beings is their ability to observe and represent reality in a much faster and broader manner than other living beings. In this regard, they leverage their anatomical capacity to develop and establish a language that enables the exchange of acquired information, and based on this, they create artifacts that enhance their relationship with the surrounding reality. These artifacts can be material or immaterial, and the law is one of them. Indeed, the law is a cybernetic process that imitates the processes of the biosphere and homeostatic processes in general. The law seeks to preserve the stability of certain goods, such as life, liberty, and dignity. For this reason, it must operate to safeguard the stability of the processes of the biosphere.

The law, as a cybernetic process, starts from sets of variables that characterize the existence of a community or society at a given moment, or a given state of reality ($R = r^1,...,r^n$), and through the legal process, it seeks to transform it into another state ($R^{(i)} = r^{1(i)},...,r^{n(i)}$) that is preferable to the initial one. Each component of a state of reality pertains to different aspects of communal life. Therefore, the law, influencing each of these components as we have already noted, must take them into account. Every type of hindrance in this transformation is subject to various controls, through processes of retroaction. Such retroaction takes place both through institutions and through values to which the members of the society attribute supreme importance. Kelsen had only apparently overlooked this aspect, focusing on the functions of enacting general norms and applying them as fundamental to the legal order.³⁹ Indeed, it cannot be overlooked that medieval

³⁹ "[...] the general norms of statutory or customary law have a two-fold function: (1) to determine the law applying organs and the procedure to be observed by them and (2) to determine the judicial and administrative acts of these organs" [Kelsen 1949, 132] and "The legal order is a system of general and individual norms connected with each other according to the principle that law regulates its own creation [...] this *regressus* finally leads to the first constitution" [Kelsen 1949, 128].

culture was built upon the recursiveness of reasoning,⁴⁰ and this approach has become fundamental in legal culture through the relationship between legislation and judicial review.

Law, thus understood as a cybernetic process,⁴¹ must confront the complexity of nature, and art the same time legal orders have their own specific characteristics.

Nature is incredibly complex, with a vast network of interconnections between species, ecosystems, and processes. This complexity presents one of the main challenges for conserving the biosphere. Law, as a human tool for governing society and managing natural resources, must take this complexity into account. To address the complexity of nature, the law must develop flexible approaches and tools that can adapt to ongoing changes in ecosystems and biodiversity. This requires an approach based on science and knowledge that considers the interconnections between species and the chain reactions that can result from legal or policy decisions. Furthermore, the law must be able to handle situations where there are conflicts between different interests related to nature. For example, conflicts may arise between biodiversity conservation and economic development. In such cases, the law must balance these interests fairly and equitably.

Another important aspect is international communication and collaboration. Since nature knows no national borders, the protection of the biosphere

⁴⁰ In this well-argued volume, the author emphasizes that the transition from antiquity to the modern construction of law and politics was significantly influenced by the diffusion of recursive reasoning from Indian and Arab universities to Europe. This approach shaped the identity of European universities and successfully maintained a balance between moral comprehension and reason-based understanding [Beckwith 2012, *passim*]

⁴¹ Legal orders are homeostatic; they tend to maintain fundamental values [Locke, II, Chap. II, 6]: "[...] there cannot be supposed any subordination among us that may authorise us to destroy one another... Every one as he is bound to preserve himself, and [...], when his own preservation comes not in competition, ought he as much as he can to preserve the rest of mankind, and not [...] take away or impair the life, or what tends to the preservation of the life, the liberty, health, limb, or goods of another." "The basis of the cybernetic model is the feedback cycle (FIG. I.l) in which, by way of feedback of information, a desired value (Sollwert) is maintained, a target is reached, etc." [Bertalanffy 1968, 150]; "regularities and laws can be found in social phenomena; [...] and we have some ideas about intrinsic, specific and organizational laws of social systems." [ibid., 199]: Luhmann however [Luhmann 1993, 465], sees some difficulty when considering "law as a cybernetic machiche in a cybernetic machine [society P.P. see Evan 1990, 219], which is programmed to maintain a steady state". From the autopoietic characteristics of legal systems it comes the difficulty to evaluate the risk [Luhmann 1993, 472], the difficulty to global communication which leads, for example in the field of human rights, to enact "supposed meta-positive law as positive law" [ibid., 483] and "the high dependence of all autopoietic systems on history" [ibid., 490]. This encourages the approach to legal orders letting each of them develop their potential, but highlighting symbiosis with nature as a common problem.

requires global cooperation. However, only taking into account the potential of each legal order that international environmental law may play a crucial role in addressing transboundary environmental issues and promoting nature conservation on a global scale. In summary, the law must be able to address the complexity of nature through the adoption of approaches based on scientific knowledge, flexibility, interest balancing, and international cooperation, at the same time motivating and enhancing the potential of each participant to the dialogue. Only through joint efforts can we hope to protect the biosphere and ensure a sustainable future for future generations. Sustainable use of domestic resources and attention to symbiosis with nature may be consistent with the specific characteristics of each legal order and thus supporting an ethics of ecological communication respectful of the different legal and cultural approaches.

6. THE ISSUE OF FUNDAMENTAL PRINCIPLES IN LEGAL SYSTEMS AND CONSTITUTIONS AND THEIR USE WITH RESPECT TO NATURE AND FORESTS

To better understand how the elements within a legal system can be used in the context of the relationship between human societies and nature, we must first briefly examine the fundamental tools of each legal system and their use in this regard. Let us begin with constitutional customs. As mentioned earlier, there have been societies in the past that sought to live in harmony with nature, respecting its elements. This approach, though fascinating, is now primarily associated with indigenous populations. Societies have also developed competitive relationships with nature, or more recently, have asserted their dominion over nature while simultaneously advocating for conservation principles. On the other hand, geobiophysics supports the idea of a conscious and active symbiosis with nature. Therefore, we need to consider how the fundamental principles of constitutions or the concept of supreme principles of a legal system can be useful in this context.

The Italian scholar Emilio Betti, considering legal principles within the framework of the theory of interpretation, which connects to the representation of law in the realm of human affairs, viewed them as legal expressions that qualify the entire legal system. They therefore concern an open and indeterminate set of legal descriptions and applications.⁴² For this reason, principles allow for the expression of creativity in the political and social processes that lead to the development of law. Another conception

⁴² "General principles, as inherent criteria for assessing the legal system, are characterized by an excess of deontological (or axiological, if you will) content compared to individual norms, even when recognized as a system" [Betti 1955 (1990), 849].

of fundamental principles, more related to the application of the law itself, was formulated by the German scholar Robert Alexy. He, primarily interested in issues of applying conflicting principles in the legal process, considered them imperatives for optimizing the values at stake.⁴³ This perspective, though fully applicable, is best suited for highly conceptually formalized constitutional models⁴⁴ and cannot easily be adapted to contexts where the application processes of the constitution are more intuitive or have other sources of cognition.⁴⁵

In both cases, we see that ignoring or not adequately considering nature in the fundamental principles of the constitution can be a sign of an approach indifferent to nature, focusing solely on human affairs, assuming either that

⁴³ Alexy writes on this subject" "According to the standard definition of principle theory (Alexy 1996, 75ff), principles are norms commanding that something be realized to the highest degree that is actually and legally possible. Principles are therefore optimization commands. They can be fulfilled in different degrees. The mandatory degree of fulfilment depends not only on actual facts but also on legal possibilities" [Alexy 2000, 295].

⁴⁴ Moreso writes: "According to Alexy, the balancing can be divided into three stages. In the first stage, the determination of the degree of non-fulfillment of the first principle takes place. In the second stage, an attempt is made to establish the degree of fulfillment of the opposing principle. In the third stage, it is determined whether the importance of fulfilling the second principle justifies the non-fulfillment of the first principle. We can divide the intensity of interference with a specific right into three degrees: light, medium, and severe. It is evident that the intensity of interference depends on the specific circumstances [...] in deadlock cases, the restrictions set by the legislator are justified [...] the concrete weight of a principle P, in conflict with a principle P, [...] is the quotient obtained by dividing the intensity of interference in the first principle (I) by the hypothetical intensity of interference in the second principle (I), assuming that the interference in the first principle is omitted. [...] According to Alexy, this reconstruction of balancing allows it to be recognized as a rationally controllable process [...]. Alexy adds another aspect to the formula, the representation of which is omitted here, namely, the reliability of empirical assumptions" [Moreso 2012, 413].

⁴⁵ As Bonilla Maldonado reflects: "The paradigmatic models of the rights of nature [...] are modern law and they are indigenous law; they simultaneously 'are' and 'are not'. The syncretism of these models calls into question the following central ideas [...]: (i) there are rich cultures that can create legal knowledge and poor cultures that cannot; (ii) the Global North has rich cultures that enable the production of law while the Global South has weak cultures that do not enable the production of real law, only morality or politics; (iii) within the Global North there are some cultures that are at the origin of Western law [...] and other cultures that, for imperialism and settlement colonisation, for example [...] (iv) Global North law is the [...] most powerful [...] legal standard and can be transferred globally; (v) Global South countries must transplant this single global legal standard to their jurisdictions if they want to construct true law; and (v) when the Global North law that has been either reproduced in the lesser cultures of the Global North or transplanted to the Global South mixes with local culture, it becomes a culturally-illegitimate offspring that is conceptually and practically ineffective" [Bonilla Maldonado 2023, 43].

nature is inexhaustible (as seen in the old theory of public goods⁴⁶) or that the state pursues a geopolitics strategy aimed at securing control over resources where they are available. This solipsistic view of societies should not be confused with a human-centered approach.

Indeed, the law can only regulate human actions. In this sense, I agree with Vico, who stated that humans did not create nature. History did.⁴⁷ On the other hand, a conception of the constitution that appears indifferent to nature can presuppose a relationship that, according to ancient legal concepts, considers the concept of occupation as the foundation for the exploitation of natural resources. However, the legitimacy of occupation depends on the perspective of the order which is produced by the occupation.⁴⁸ This approach suggests that some communities may not be able to claim sovereignty over natural resources due to a lack of organizational capacity or suitable cultural origins. It also postulates the possibility for powers that mutually recognize each other to divide the world beyond which different forms of occupation, even violent ones, are legitimate.

⁴⁶ Reiss considers different notions, and to start with, the one proposed by Paul Samuelson, who defines a public good as a good, "which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtractions from any other individual's consumption of that good [...]" [Reiss 2021, section 1]: "In the legal perspective see the opinion of Grotius, who writes: "so of those things which nature had brought forth for the use of man she would that some of them should remain common and others through every one's labor and industry to become proper. But laws were set down for both, that all surely might use common things without the damage of all and, for the rest, every man contented with his portion should abstain from another's" [Grotius 2004, 6].

⁴⁷ As Benedetto Croce writes about Giambattista Vico's approach: "He reconstructed the history of man; and what was the history of man if not a product of man himself? Who makes history if not man, with his ideas, his feelings, his passions, his will, his action? And isn't the human spirit that makes history the same one that is engaged in thinking and understanding it? The truth of the generative principles of history, therefore, arises not from the strength of clear and distinct ideas but from the inseparable connection between the subject and the object of knowledge" [Croce 2022]. With the words of Giambattista Vico [1744, 124-25]: "Indeed, we advance to assert that whoever contemplates this Science narrates to themselves this Eternal Ideal Story because, as this World of Nations has undoubtedly been made by Men, which is the First Undoubted Principle that has been placed above it; and therefore, since the manner of it must be found within the modifications of our own Human Mind, he, in that endeavor, MUST, SHALL, WILL indeed make it for himself. For when it happens that the one who does things also narrates them, there the History cannot be more certain" [1922, 23].

⁴⁸ According with Schmitt, who published the first edition of the quoted work in 1950: "The term Landnahme (land-appropriation), used here to describe a process of order and orientation that is based on firm land and establishes law, has been in common usage only in the last few decades [...] there are two different types of land-appropriations: those that proceed within a given order of international law, which readily receive the recognition of other peoples, and others, which uproot an existing spatial order and establish a new nomos of the whole spatial sphere of neighboring peoples" [Schmitt 2006, 80-82].

The fact that these conceptions, among them the one of "amity lines"⁴⁹ which Schmitt considered to underlie the Jus Publicum Europæum, have been disavowed by positive international law through decolonization does not mean that they lack ideological effectiveness, even in an analogical perspective. In fact, from the law of decolonization, the system of the United Nations has derived the affirmation of the absolute sovereignty of states over natural resources. These two principles, namely the right to independence and formal autonomy of states, combined with state sovereignty over natural resources, have generated a series of geopolitical claims.⁵⁰

The Cold War, globalization, and the ongoing conflict between Russia and Ukraine are manifestations of geopolitical conflicts. On the other hand, the decolonization process merged with the attempts by colonial states to secure control over the economic and financial resources of the countries from which they were relinquishing territorial control.⁵¹ The resulting process is conceptually linked, on the one hand with Grotius's concept of the free

⁴⁹ As Schmitt wrote: "The characteristic feature of amity lines consisted in that [...] they defined a sphere of conflict between contractual parties seeking to appropriate land, precisely because they lacked any common presupposition [...] the only matter they could agree on was the freedom of the open spaces that began 'beyond the line'. [...] A closer [...] consideration of amity lines in the 16th and 17th centuries reveals two types of 'open' spaces [...]: first, an immeasurable space of free land – the New World, America [...] free for appropriation by Europeans – where the 'old' Jaw was not in force; and second, the free sea [...]." However, he observes that "the Congo Act of February 26, 1885" [Schmitt 2006, 224] "attempted to bind international freedom with neutralization of the Congo Basin. The type and means of the realization of this endeavor were of great symptomatic significance. Thus, neutralization was meant both to guarantee free trade and to prevent Europeans from engaging in war with each other on the soil of Central Africa with the Africans' consent and complicity" [ibid., 219].

⁵⁰ Among these voices are those advocating for the imperative constitutionalization of the transformation of all raw materials in Africa. This move aims to empower Africans to effectively and swiftly combat poverty by fostering dynamic wealth accumulation through value-added processes in the local production of finished goods, which can be marketed both within and beyond the African continent [Agbohou 1999, 269 *passim*].

⁵¹ Concerning the former French colonies: "Despite the diversity of colonial bloc logics, the initial project is consistently similar, centered around the exploitation of colonies based on the needs of the metropolises. This project, which can be referred to as economic standardization, has led to a recognizable structure characterized by key elements such as the binary, the branch, and the trail network. The exploitation of mining and agricultural resources, along with political control over inland territories, initially required the construction of penetrative routes and coastal exit points" [Debrie 2007, 50]. Instead for what concerns the former Commonwealth: "Offshore finance is [...] believed to have emerged in 1958 [...] due to the Suez canal crisis and the ensuing run on the sterling [...] London's position at the earth of offshore financial market can be traced back to attempt by successive British governments to reestablish London at the center of global financial activities after the second World War." In both the cases the attempt to recreate a space order appears evident [Palan 1998, 631-32].

sea and, on the other hand, with Schmitt's ideas about demarcation lines and large spaces. As a result, it has rendered the connection between natural resources and the safeguarding of life, liberty, and property progressively intricate and challenging to oversee.

Indeed, financial markets controlled beyond national borders have led to the convergence of finances from tax evasion and finances from criminal activities. Even though a fundamental complexity issue is that each country and In what we might call the "open financial sea", financial values are not directed towards implementing the constitutional principles of communities or limiting power to enable conscious symbiosis with nature.

The presence of such tensions and contradictions, shall not lead one to forget that at present times many states and many communities have the ambition to develop their own space order [Agbohou 1999, 269 *passim*; Bonilla Maldonado 2021, 10/42⁵²]. For this reason, the enunciation of principles recognizing the importance of biodiversity, the legal personality of nature and of human life in symbiosis with it in the national constitution is of great importance. However, their scope should not be overestimated. Firstly, because the issue of recognizing the normative force of the constitution remains highly problematic, despite the various advances made.⁵³ Secondly, because even if the normative force of the constitution is recognized, its overly general formulation leaves too much room for the discretion of legislators, judges, and society. Consequently, their implementation becomes challenging. Several examples can be given, including that of the 2018 decision of the Supreme Court of Colombia on climate change.

This Court was petitioned at the end of a complex case that also involved a decision by the Constitutional Court. The initiative to institute legal

⁵² The creation of a new space order following the recognition of the rights of nature is altogether difficult and jeopardizes the creation of a new space order: "The rights of nature (and their representatives), however, are in tension with other rights that are also part of the legal systems in which they are located, for example, the right to a healthy environment, the right to equality, and the right to sustainable development. These rights protect nature by appealing to an anthropocentric perspective (nature is defended to safeguard the interests of human beings) or they conceptualise nature as a resource that should be exploited to generate wealth that can be redistributed in the political community. Hence, Bolivia and Ecuador are currently described as neo-extractivist countries or countries committed to 'social extractivism'" [Bonilla Maldonado].

⁵³ Let us consider at least the words of Jeremy Waldron that calls for "a reasonably sophisticated, approach [...] to talk in a grown-up way about the social foundations of a system of norms that is legal, and about the complexity of both the social phenomena and the emergent legal phenomena that this involves" [Waldron 2006, 1713]. Therefore, when dealing with constitutional norms that aim to restore equilibrium with society and nature, it is crucial, during their enactment, to develop practices that enable people to comprehend their significance and actively participate in the implementation of these norms [Policastro 2015; Idem 2016; Idem 2019, *passim*].

proceedings came from a group of young citizens from Amazonian countries who pointed out the danger to their lives and well-being resulting from excessive exploitation of Amazon resources. The Supreme Court sentenced all public institutions in the country to develop a plan, including sustainable logging and mining as well as reforestation.⁵⁴ However, it is observed that the decision of the Supreme Court has not been implemented due to difficulties in formulating and implementing such a plan.⁵⁵

As is known, while France has long included the Nature Charter in its constitutional framework, which is a subject of great interest and debate [Boda 2008, *passim*], the Italian Constitution has included the issue of biodiversity among its fundamental principles [Piscitelli et al. 2022, *passim*.], i.e., among its political-ideological principles [Carrara, Martorana, and Saltarelli 2022, *passim*]. Several constitutions, starting with those of Bolivia⁵⁶

⁵⁴ Supreme Court of Colombia, Luis Armando Tolosa Villabuena, Reporting Justice, STC4360-2018 (April 4, 2018), "it is ORDERED to the Presidency of the Republic and the Ministry of Environment [...] to develop a short, medium, and long-term action plan to counteract the deforestation rate in the Amazon, where they must address the effects of climate change [...]."

⁵⁵ According with the well informed and attentive internet platform "De Justicia": "First order: a plan of action to counteract deforestation in the Amazon has not yet been formulated." See https://www.dejusticia.org/que-le-hace-falta-al-gobierno-para-implementar-la-sentenciacontra-el-cambio-climatico-y-la-deforestacion/ [accessed: 15.09.2023].

⁵⁶ See "Official Gazette Plurinational State of Bolivia. Law 71 Published in Edition: 205NEC Publication Date: December 22, 2010. Law of December 21, 2010 - "Recognizes the rights of Mother Earth, as well as the obligations and duties of the Plurinational State and society to ensure respect for these rights." See also Law 300 Published in Edition: 431NEC Publication Date: October 15, 2012. Law of October 15, 2012 - "Framework law of Mother earth and comprehensive development for living well." Concerning law 71 see at least: "Article 3 [...] Mother Earth is the dynamic living system comprised of the indivisible community of all life systems and living beings, who share a common destiny. Mother Earth is considered sacred. Article 5. [...] Mother Earth adopts the character of a collective subject of public interest. Mother Earth and all its components, including human communities, are the bearers of all inherent rights recognized in this Law [...]. Article 6 [...] All Bolivians [...] exercise the rights established in this Law [...]." Concerning the organic law 300 of 2012: "Article 5 [...] 1 [...] Mother Earth is considered sacred; she nourishes and is the home that contains, sustains, and reproduces all living beings [...] 2. Living Well (Sumaj Kamaña, Sumaj Kausay, Yaiko Kavi Päve). It is the civilizational and cultural horizon [...] that arises from the worldviews of indigenous [...] peasant nations and peoples [...]. It is achieved collectively, complementarily, and in solidarity [...] 3. Integral Development for Living Well. It is the continuous process of generating and implementing [...] measures and actions for the creation, provision, and strengthening [...] material, social, and spiritual means [...] to achieve Living Well in harmony with Mother Earth [...]. 4. Components of Mother Earth for Living Well. They are the beings, elements, and processes that make up life systems located in different life zones, which, under conditions of sustainable development, can be used or harnessed by human beings as natural resources, as established by the Political Constitution of the State."

and Ecuador,⁵⁷ have recognized a legal status of nature.⁵⁸ In New Zealand, the legal personality of two areas of importance to native cultures, one of which encompasses the entire space, both physical and metaphysical, of a river, has been recognized.⁵⁹ There is a growing literature dealing with these aspects.⁶⁰

However, the recognition of the legal status of nature has manifested itself in Latin America in a state context where, faced with the complexity of indigenous nations, the affirmation of the legal personality of nature has also emerged as an attempt by the prevailing indigenous nations to assert their legal importance within the national political territory.⁶¹ From this perspective, it should be emphasized that the relationship between nature and the limitation of political power must be understood taking into account the diversity of nature itself and, therefore, the need to protect the different ways in which the relationship between humanity and nature is configured,

⁵⁷ We shall remember here at least: "Constitution of the Republic of Ecuador, Official Registry No. 449, October 20, 2008 [...] Preamble [...] Celebrating nature, the Pacha Mama, of which we are a part, and which is vital for our existence [...] we decide to build a new form of citizen coexistence in diversity and harmony with nature, to achieve the good life, the sumak kaway [...] Title II Rights [...] Article 71. Nature or Pacha Mama, where life is reproduced and realized, has the right to have its existence fully respected, as well as the maintenance and regeneration of its vital cycles, structure, functions, and evolutionary processes. Every person, community, people, or nationality may demand from the public authorities the fulfillment of the rights of nature [...] Article 74. Individuals, communities, peoples, and nationalities have the right to benefit from the environment and natural resources that enable them to live well [...] Article 83. It is the duty and responsibility of Ecuadorians [...] 6. To respect the rights of nature, preserve a healthy environment, and use natural resources in a rational, sustainable, and responsible manner."

⁵⁸ As of now, the "legal toolkit" of "Eco Jurisprudence Monitor" identifies 356 issues related to the rights of nature, 90 on indigenous knowledge related to the relationship with nature, 79 on the eco-governance system, 74 on legal personality for nature, 42 on animal rights, and 5 on local ecological knowledge.

⁵⁹ New Zealand Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 [...] Article 14 [...] (1) Te Awa Tupua is a legal person and has all the rights, powers, duties, and liabilities of a legal person."

⁶⁰ According to Bonilla Maldonado: "A search on 'derechos de la naturaleza' and 'rights of nature' in Google Scholar yields 21,100 publications on the subject in Spanish and 15,800 in English. In HeinOnline, 2,079 texts appear when searching for the words 'rights of nature', and in JSTOR 555 articles appear when entering these same words in the search engine. Over the last fifteen years, a network of scholars studying these rights has developed, and the corresponding body of scholarship is profoundly heterogeneous" [Bonilla Maldonado 2023, 33-42].

⁶¹ More in general, "It is important to consider the critiques offered against rights of nature, among others, that they essentialise indigenous communities; that they do not really represent the religious views of indigenous communities; that they homogenise the very diverse cultures of indigenous peoples; and that they can be used against indigenous groups' rights" [Bonilla Maldonado 2023, 10-42, footnote 35, *passim*].

especially among the various populations that have developed a way of life in symbiosis with nature. One conclusion that can be drawn is that the development of conscious symbiosis with nature, as proposed by proponents of different scientific approaches, is consistent with the postulate of equality, understood as the protection of differences, which is a fundamental characteristic of constitutionalism. Indeed they demand proportional efforts of each one to preserve the state of the Biosphere. As we have been seeing, the constitutions of Bolivia and Ecuador included such aspects.

It's worth noting that various models exist for recognizing the legal status of nature, each with its unique set of challenges. These challenges encompass issues ranging from control to the enforcement of rights. For instance, in New Zealand, "rights derived from ecological credentials may confine Indigenous communities to future scenarios of non-development" [Coombes 2020]. Similar situations have been observed in Africa, particularly among the Maasai people [Melubo 2020, *passim*], where conservationist approaches aimed to displace these communities from their ancestral lands. In the USA, the establishment of a land allotment system without due consideration of the customs and requests of Native American nations has led to enduring problems.⁶²

In Latin America, objections have arisen against some indigenous nations, alleging that they are exercising self-governance over nature, even through resource extraction. Also in New Zealand, Maori viewpoints appear significantly underestimated.⁶³ This situation underscores the ambiguity between recognizing rights for nature and protecting the existential connection between individuals and nature, which is deeply rooted in their ancestral heritage. We cannot think of taking care of natural mechanisms if we do not take proper consideration of human symbiosis with nature, which demands a conscious and participating attention to the fruits of nature and the preservation of its mechanisms. We can hardly think of protecting nature without considering that natural resources are essential for both the material and spiritual life of human beings.

⁶² According with Bobroff: "Indians had many different, functional, and evolving property systems, many of which recognized private property rights in land. [...] to replace these multiple, functioning property systems with a single, dysfunctional system, one that failed to provide for property transfers and rational inheritance" [Bobroff 2001, 1621].

⁶³ Coombes refers in a documented way to the implementation of the rights of Mori populations saying: "Many Indigenous philosophers call for renewal of kinship bonds with non-human others, [...]. However, [...] the rights-for-nature framework is exogenous to Maori communities, but its apparent imminence and relevance to Indigenous cultures may displace other agendas, and particularly the desire to renew ownership of lands lost to colonial practices. The philosophies that inform Te Urewera's newfound status [...] are a continuation of historically resilient discourses of wilderness and its preservation that have alienated Maori from their homelands in the past" [Coombes 2020, *passim*].

Despite these difficulties, we believe that constitutions can play an essential role in the relationship between humanity and nature. First and foremost, by recognizing the importance of human activities aimed at achieving conscious symbiosis between human societies and nature. Formulating such recognition is complex because it is very difficult to indicate how the essence of human freedom can be directed towards achieving symbiosis with nature. In our opinion, introducing provisions into the constitution that recognize the importance of education (including lifelong education) as a moment of development and transformation of society and that emphasize that education must be based on constant research aimed at developing models for the symbiotic development of nature, seems clear and prudent. On the other hand, indicating support for organizations with ecological purposes could turn out to be an ambiguous solution that privileges organizations that, through seemingly ecologically-oriented claims, primarily seek a transfer of political power in their favor without presenting clear and sustainable solutions.64

Furthermore, an important contribution that constitutions could make to improving relations between society and nature, in our opinion, is the recognition of the legal personality of forests [Policastro 2021-2022, V passim, Policastro 2023, passim], along with the fundamental public obligation to manage renewable forest resources in a sustainable manner, by combining the productive, ecological, and social functions of forests. This principle requires simultaneously enunciating the principle that forest management applies to both public and private forests. It is evident that this principle does not violate property rights or limit them in a way that prejudices the public interest. Instead, it allows for the efficient exercise of these functions for present and future generations through the simultaneous exercise of productive, ecological, and social functions. In this perspective, even indigenous populations, being obliged to develop a management plan, will be required to share their observations regarding the inventory and sustainability of natural resource extraction, and constitutional forest authorities will be obliged to listen, thereby improving the level of ecological communication. It is clear that the top bodies of a constitutional authority responsible for forest management must be appointed with the participation of the fundamental constitutional bodies, namely the Parliament and the Presidency

⁶⁴ Sénit is one of the authors, who focused in a recent and documented study: "on the role of the participatory space, and reveals a reverse correlation between civil society influence, and inclusive, democratic global policymaking. In particular, the study showed that civil society actors have higher chances of influence when they engage in informal participatory spaces. Yet these spaces are also the most exclusive ones, to which highly organized, professionalized civil society actors have a privileged access, compared to the resourceless" [Sénit 2019]. These results appear very eloquent.

of the Republic. At the same time, the proposal of candidate lists can be left to civil society, particularly to communities dedicated to forest care or living on its margins.

7. CONCLUSION: LEGAL PERSONALITY OF FORESTS AND CONSTITUTIONAL ECOLOGY OF THE BIOSPHERE

The constitutional recognition of the legal personality of forests must go hand in hand with their decentralized management. In this way, the existing relationships between nature and space can be adequately respected. The coherence between the constitutional legal personality of forests and the constitutional governance of the state is also realized by considering the relationship between law and time. Forest management plans, according to the dictates of forestry science, last for 10 years. They must be formulated precisely so that they can be transferred to foresters who will be responsible for their evolution. Therefore, by assuming the principle of adaptation to the different conformation of nature in space, and thus a significant plurality of plans at the national level, the proposal for a decade-long legislation of information and coordination on these plans can better involve institutions and society in a discourse based on listening logos-leghein [Heidegger 2000, 180, passim]65 to the Biosphere, taking into account that the time needed by nature to develop and renew resources is longer than that of human societies.

REFERENCES

- Agbohou, Nicolas. 1999. Le franc CFA et l'Euro contre l'Afrique: pour une monnaie africaine et la coopération Sud-Sud. Paris: Solidarité Mondiale. A synthesis is available at: https://agriprofocus.com/upload/Le_FCFA_un_obstacle_pour_le_developpe-ment1432203491.pdf [accessed: 20.09.2023].
- Alexy, Robert. 2000. "On the Structure of Legal Principles." Ratio Juris 13, no. 3:294-304.
- Barnosky, et al. 2011. "Has the Earth's sixth mass extinction already arrived." *Nature* 471:51-57.
- Berry, Christopher M. 2019. "Palaeobotany: The Rise of the Earth's Early Forests." Current Biology 29, no. 16:792-94.
- Bertalanffy, Ludwig von. 1968. General System Theory Foundations, Development, Applications. New York: George Brazillier.

⁶⁵ "The essence of logos as gathering yields an essential consequence for the character of legein. Legein as gathering, determined in this way, is related to the originary gatheredness of Being, and Being means coming-into-unconcealment; this gathering therefore has the basic character of opening up, revealing. Legein is thus contrasted clearly and sharply with covering up and concealing."

- Betti, Emilio. 1955. *Teoria generale dell'interpretazione*. II volumes, edited by G. Crifó. Milano: Giuffré 1990.
- Bobroff, Kenneth H. 2001, "Retelling Allotment: Indian Property Rights and the Myth of Common Ownership." *Vanderbilt Law Review* 54 (4) May, Article 2: 1559-623.
- Boda, Jean-Sébastien. 2008. "L'effectivité problématique des normes constitutionnelles: l'exemple de la charte de l'environnement." In À *la recherche de l'effectivité des droits de l'homme*, new edition, edited by Véronique Champeil-Desplats, and Danièle Lochak, 77-88. Nanterre: Presses universitaires de Paris Nanterre.
- Bonilla Maldonado, Daniel. 2022. "Los derechos de la naturaleza: su arquitectura conceptual." *Naturaleza y Sociedad. Desafíos Medioambientales* 4:70–108.
- Bonilla Maldonado, Daniel. 2023. "Global Legal Pluralism and the Rights of Nature." Max Planck Private Law Research Paper 23/15:1-42.
- Carrara, Cecilia, Cristina Martorana, and Ivano Santarelli. 2022. "La tutela dell'ambiente entra in Costituzione: e ora?" *Newsletter Legance*. https://www.legance.com/ la-tutela-dellambiente-entra-in-costituzione-e-ora/ [accessed: 04.09.2023].
- Coombes, Brad. 2020. "Nature's rights as Indigenous rights? Mis/recognition through personhood for Te Urewera." *Espace populations sociétés*. DOI: https://doi.org/10.4000/eps.9857http://journals.openedition.org/eps/9857 [accessed: 04.09.2023].
- Croce, Benedetto. 1922. La filosofia di Giambattista Vico. Bari: Laterza.
- Debrie, Jean. 2007. "Géohistoire d'un tracé technique: frontières et réseaux en Afrique de l'ouest continentale « francophone »." *Flux* 70:49-58.
- Dworkin, Ronald. 1977. *Taking Rights Seriously*. Cambridge, Ma.: Harvard University Press.
- Ereira, Alan. 1990. The Elder Brothers' Warning. UK: Tairona Heritage Trust.
- Evan, William M. 1990. Social structure and law. Theoretical and empirical perspectives. Newbury Park, Ca.: Sage.
- Grotius, Hugo. 2004. *The Free Sea Translated by Richard Hakluyt with William Welwod's Critique and Grotius's Reply.* Edited and with an Introductionby David Armitage [first ed: Mare Liberum, sive de jure quod Batavis competit ad Indicana commercia dissertatio, Elzevier (1609)], Indianapolis: Liberty Fund.
- Heidegger, Martin. 1935. Einführung in die Metaphysik, Hrsg. von Petra Jaeger 2., durchgesehene Auflage 2020. Martin Heidegger Gesamtausgabe 40. (English version: Introduction to Metaphysics, Yale University Press. First edition 1959, translated by Ralph Manheim. Second version 2000, translated by Gregory Fried and Richard Polt).
- Hautereau-Boutonnet, Mathilde, and Éve Truilhé. 2020. "Procès et environnement: quelles actions en justice pour l'environnement?". In Mathilde Hautereau-Boutonnet, and Éve Truilhé, *Procès et environnement: quelles actions en justice pour l'environnement*? [en ligne]. Aix-en-Provence: Droits International, Comparé et européen. http://dice.univ-amu.fr/fr/dice/dice/publications/confluence-droits
- Häusler, Andreas, and Michael Scherer-Lorenzen. 2002. Sustainable Forest Management in Germany: *The Ecosystem Approach of the Biodiversity Convention reconsidered.* Results of the R+D-Project 800 83 00, Bundesamt für Naturschutz (BfN), German Federal Agency for Nature Conservation. http://www.bfn.de
- Kelsen, Hans. 1943. Society and Nature. *A Sociological Inquiry*. Chicago, Illinois, U.S.A: University of Chicago Press.

- Kelsen, Hans. 1949. *General Theory of Law and State*. Translated by Anders Wedberg. Cambridge: Ma. Harvard University Press.
- Krąpiec, Mieczysław A. 1986. "Monizm-Pluralizm." *Roczniki Filozoficzne* XXXIV, no. 1:21-79.
- Le Guin, Ursula K. 1972. "The Word for World is Forest." In Again, Dangerous Visions. 46 Original Stories, edited by Harlan Ellison, 28-118. New York: Doubleday & Company, Inc. Garden City.
- Locke, John. 1690. "Two Treatises of Government. In the Former, The False Principles and Foundation of Sir Robert Filmer, and His Followers, Are Detected and Overthrown: The Latter, Is an Essay Concerning the Original, Extent, and End, of Civil Government." From: *The Works of John Locke. A New Edition, Corrected. In Ten Volumes.* Vol. V. London: Printed for Thomas Tegg; W. Sharpe and Son; G. Offor; G. and J. Robinson; J. Evans and Co.; Also R. Griffin and Co. Glasgow; and J. Gumming, Dublin 1823.
- Lotman, Yuri M. 1990. "Three functions of the text." In Yuri M. Lotman, Universe of the Mind: A Semiotic Theory of Culture, translated by Ann Shukman; introduction by Umberto Eco, 11-19. Bloomington & Indianapolis.
- Lovelock, James. 1979. Gaia. A New Look at Life on Earth. Oxford: Oxford University Press.
- Luhmann, Niklas. 1986. Ökologische Kommunikation. Kann die moderne Gesellschaft sich auf ökologische Gefährdungen einstellen?. Opladen: Westdeutscher Verlag GmbH. English version: 1987. Ecological Communication. Translated by John Bednarz Jr. The University of Chicago Press, Polity Press Cambridge.
- Luhmann, Niklas. 1993 *Das Recht der Gesellschaft.* Frankfurt am Main: Suhrkamp Verlag. English translation: 2004. *Law as a social system.* Translated by Klaus A. Ziegert, edited by Fatima Kastner, Richard Nobles, David Schiff, and Rosamund Ziegert. Oxford: Oxford University Press.
- Margulis, Linn. 1998. The Symbiotic Planet. A New Look at Evolution. New York: N.Y., Basic Books.
- Melubo, Kokel. 2020. "Why are wildlife on the Maasai doorsteps? Insights from the Maasai of Tanzania." AlterNative: *An International Journal of Indigenous Peoples* 16, no. 3:180-92.
- Moreso, José Juan. 2012. "Alexy Und Die Arithmetik Der Abwägung." ARSP: Archiv Für Rechts- Und Sozialphilosophie / Archives for Philosophy of Law and Social Philosophy 98, no. 3:411-20.
- Palan, Ronen. 1998. "Trying to Have Your Cake and Eating It: How and Why the State System Has Created Offshore." *International Studies Quarterly* 42, no. 4:625-43.
- Piscitelli, Prisco. et. al. 2022. "Italian Constitution amended to include environmental and health protection: A model for Europe." *The Lancet Regional Health – Europe* 16 (May): 100367, https://doi.org/10.1016/j.lanepe.2022.100367
- Policastro, Pasquale. 2010. "Constitutionalism, Comparison, Complexity: Prolegomena on Liberty and the use of Language for a Predictive Theory of Law." In Liberty and Language, *The global dimension of European constitutional integration*, edited by Emilio Castorina, and Pasquale Policastro, 15-110. Torino: Giappichelli.
- Policastro, Pasquale. 2010. "Godność człowieka wobec wartości konstytucyjnych," In W poszukiwaniu dobra wspólnego. Księga Jubileuszowa Profesora Macieja

Zielińskiego, edited by Agnieszka Choduń, and Stanisław Czepita, 613-53. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.

- Policastro, Pasquale. 2010. "Interdipendenze costituzionali e protezione della persona." In Scritti in Onore di Luigi Arcidiacono, Università di Catania, n. 239, new series (7 volumes). Torino: Giappichelli Vol. VI, 2635-675.
- Policastro, Pasquale. 2012. "Constitutionalism vs. Economic Analysis: On the Use of Founding Theories and Complementary Theories in Constitutional Interpretation." In *Interdisciplinary Research in Jurisprudence and Constitutionalism*, edited by: Stephan Kirste, Anne van Aaken, Michael Anderheiden, and Pasquale Policastro, 173-203. ARSP Beiheft 127. Stuttgart: Franz Steiner Verlagç.
- Policastro, Pasquale. 2015. "The Law of Biosphere: Duties of The Nations and Common Good." In Prof. univ. dr. Pasquale Policastro – Doctor Honoris Causa al Universității "1 Decembrie 1918" din Alba Iulia. Alba Iulia: Casă de editură universitară.
- Policastro, Pasquale. 2016. "Biosfera, politica del diritto e educazione delle coscienze." In *Democrazia e religioni. Libertà religiosa, diversità e convivenza nell'Europa del XXI secolo* (Atti del Convegno Nazionale ADEC Trento, 22-23 ottobre 2015), edited by Erminia Camassa. Quaderni della Facoltà di Giurisprudenza dell'Università degli Studi di Trento. (21): 43-77. Napoli, Editoriale Scientifica.
- Policastro, Pasquale. 2019. "Planting Trees to Plant Life. Care of the Common Home and Pedagogy of a Green Heart." *Educatio Catholica* 5 (2-3) Service Learning: 141-56.
- Policastro, Pasquale. 2020. "Superior values and the foundation of constitutional comparison: peace, symbiosis with the biosphere and transnational citizenship." In *Profesor Marek Safjan znany i nieznany. Księga jubileuszowa z okazji siedemdziesiątych urodzin.* Warszawa: C.H. Beck.
- Policastro, Pasquale. 2022-2023. Plany urządzenia i ochrony lasów w prawie Unii Europejskiej (UE), w prawie polskim i w innych wybranych państwach członkowskich Unii Europejskiej: utworzenie, implementacja, stosowanie prawa i udział społeczeństwa w perspektywie "Green Deal", "Natura 2000", Konwencja z Aarhus, a także w wiążącym prawie międzynarodowym i w dobrych praktykach. I. Część Pierwsza; "Polskie lasy: szansa dla Unii Europejskiej". II. Część Druga: "Solidarność, Prawo i Komunikacja Ekologiczna na rzecz Wspólnego Podejścia do Planu Urządzenia Lasu i Polityki Leśne". Aneks: "Ku Ekologii Biosfery". III. Część Czwarta: "Światowe Centrum Zalesienia". V. Część Piąta:"Lasy: Tło Naszego Życia". Usługa badawcza na rzecz Generalnej Dyrekcji Lasów Państwowych, Wydział Prawa i Administracji Uniwersytetu Szczecińskiego.
- Policastro, Pasquale. 2023. "Polish State Forests for the World: Towards a Constitutional Legal Status of Forests." In *Proceedings of the International Conference "The Forest Factor"* (Roma, Italy, 5-7 June 2023 Aula Magna Dipartimento Architettura Università degli Studi Roma Tre), forthcoming. Edited by Mario Salomone.
- Powers, Richard. 2018. The Overstory. London: Penguin Random House UK, Vintage.
- Reiss, Julian. 2021. "Public Goods." In *The Stanford Encyclopedia of Philosophy* (Fall 2021 Edition), edited by Edward N. Zalta. https://plato.stanford.edu/archives/fall2021/entries/public-goods/

- Rosenfeld, Michel. 2005. "Dworkin and the One Law Principle: A Pluralist Critique." Revue internationale de philosophie 233:363-92. https://doi.org/10.3917/rip.233.0363
- Schmitt, Carl. 2006. Der Nomos der Erde im Volkerrecht des Jus Publicum Europaeum. Berlin: Duncker & Humblot, 1950 (2nd ed., 1974). English version: The Nomos of the Earth in the International Law of the Jus Publicum Europaeum. Translated and annotated by G.L. Ulmen. Telos: New York, N.Y.

Saint-Marc, Philippe. 1971. Socialisation de la Nature. Paris. 1975 (7 ed.).

- Sénit, Carole-Anne. 2019. "Leaving no one behind? The influence of civil society participation on Sustainable Development Goals." *EPC: Politics and Space* 38, no. 4:693-712.
- Stilz, Anna. 2019. Territorial Sovereignty: A Philosophical Exploration. New York, NY: Oxford University Press. (online ed. Oxford Academic, 24 Oct. 2019, https://doi. org/10.1093/oso/9780198833536.003.0008, accessed: 25.09.2023).
- Toynbee, Arnold J. 1954. *A Study of History.* Vol. IX, Chapter XI. Law and Freedom in History: 167-405. London: Oxford University Press,
- Vernadsky, Vladimir I. 1926. *The Biosphere*. Complete Annotated edition, A Peter N. Nevramont Book, 1997-1998. New York: Copernicus Springer Verlag (first ed. Биосфера, Ленинград 1926).
- Vernadsky, Vladimir I. 1945. "The Biosphere and the Noosphere." *American Scientist* 33, no. 1:1-13 (January 1945). The essay is the English translation of a text from 1938.
- Vico, Giambattista. 1725-1744. La Scienza Nuova. Napoli. Concerning the edition of 1725: Vico, Autobiografia. Poesie. Scienza Nuova, edited by Pasquale Soccio, Milano, Garzanti editore, 1973. Concerning the edition of 1744: Giambattista Vico, La Scienza Nuova 1744, Laboratorio dell'Istituto per la Storia del Pensiero Filosofico CNR (ISPF), XII, 2015. DOI: 10.12862/ispf15L101.
- Waldron, Jeremy. 2006. "Are Constitutional Norms Legal Norms?" Fordham Law Review 75, no. 3, article 24.
- Whitman, Walt. 1855. *Leaves of Grass*. Portland Maine Thomas Bird Mosher William Francis Gable.