

Revista de
**Direito Econômico e
Socioambiental**

ISSN 2179-8214

Licenciado sob uma Licença Creative Commons



REVISTA DE DIREITO ECONÔMICO E SOCIOAMBIENTAL

vol. 8 | n. 2 | maio/agosto 2017 | ISSN 2179-8214

Periodicidade quadrimestral | www.pucpr.br/direitoeconomico

Curitiba | Programa de Pós-Graduação em Direito da PUCPR



Ecological State and Ecocentrism: introductory parameters for sustainability according to Klaus Bosselmann

Estado Ecológico e Ecocentrismo: parâmetros introdutórios para a sustentabilidade segundo Klaus Bosselmann

Ana Stela Câmara *

Centro Universitário Christus (Brasil)

emailastela@gmail.com

Recebido: 30/08/2017

Received: 08/30/2017

Aprovado: 09/09/2017

Approved: 09/09/2017

Abstract

The existence of an unprecedented environmental crisis in the history of mankind has led to many reflections on how states should incorporate the environmental preservation, in order to prevent or minimize its effects. From discussions in Germany, it comes Klaus Bosselmann's contribution, which advocates the need to overcome the anthropocentrism as the only possible condition for the formulation of a really sustainable alternative of political and social organization. On that basis, and taking into account its political, legal and economic

Como citar este artigo/*How to cite this article*: CÂMARA, Ana Stela. Ecological State and Ecocentrism: introductory parameters for sustainability according to Klaus Bosselmann. **Revista de Direito Econômico e Socioambiental**, Curitiba, v. 8, n. 2, p. 92-113, maio/ago. 2017. doi: 10.7213/rev.dir.econ.soc.v8i2.18504

* Professora de Direito Ambiental no Centro Universitário Christus (Fortaleza – CE, Brasil). Doutora em Direito pela Universidade Federal do Ceará. E-mail: emailastela@gmail.com.

implications, the author elaborates the model of the Ecological State. The objective of this study is to introduce this author's ecocentrist thinking, aiming at the feasibility of building a dialogue that allows new horizons for overcoming the ecological crisis that has been established. Regarding methodology, we used a qualitative, theoretical, comparative, bibliographical, documental, explanatory and transdisciplinary approach, and dialectical methodology with inductive predominance. We analysed national and foreign doctrine that have fled the anthropocentric route.

Keywords: ecological State; ecocentrism; Klaus Bosselmann; sustainability; ecological crisis.

Resumo

A existência de uma crise ambiental sem precedentes na história da humanidade tem levado a muitas reflexões sobre de que forma os Estados devem incorporar a preservação do meio ambiente, de modo a prevenir ou minimizar os seus efeitos. Dos debates na Alemanha, surge a contribuição de Klaus Bosselmann, que defende a necessidade de superação do antropocentrismo como única condição possível à elaboração de uma alternativa de organização política e social efetivamente sustentável. Com base nesse pressuposto, e levando-se em consideração suas implicações políticas, jurídicas e econômicas, o autor elabora o modelo do Estado Ecológico. O objetivo deste estudo é apresentar o pensamento ecocentrista do autor, almejando-se a viabilidade da construção de um diálogo que possibilite novos horizontes para a superação da crise ecológica ora instaurada. Quanto à metodologia, utilizou-se de pesquisa qualitativa, teórica, comparativa, explicativa e transdisciplinar, abordagem dialética com predominância indutiva. As técnicas de pesquisa compõem-se de levantamento bibliográfico, a partir da análise de construções doutrinárias nacionais e estrangeiras que tem fugido da rota antropocêntrica.

Palavras-chave: Estado ecológico; ecocentrismo; Klaus Bosselmann; sustentabilidade; crise ecológica.

Contents

1. Introduction. **2.** An idea rises: the Environmental Rule of Law. **3.** From the Environmental State to the Ecological State. **4.** Ecocentrism and the attribution of intrinsic value to nature as an ethical fundament of the Ecological State and sustainability. **5.** Conclusion. **6.** References.

1. Introduction

The existence of an unprecedented environmental crisis in the history of mankind inaugurated, especially since the 1970s, an international

tendency to incorporate political and legal mechanisms to protect the environment.

Since then, the incorporation of environmental law in the constitutions of many western countries began to be structured, proliferating a theoretical model generically identified by the Environmental State, whose bases were coined by German jurists, in which the protection of the environment for the present and future human generations is among the fundamental objectives of the State.

This situation is particularly worrying when it appears that efforts to date have not been sufficient to reverse the logic of increasing environmental destruction: there are indications of worsening situations related to climate events, pollution of the most diverse ecosystems, deforestation, loss of biodiversity, among others.

This means that the legal treatment of environmental protection must remain open and under examination, from its foundations and assumptions to the preparation of new proposals to better conform to the conditions of existence of the planet.

Faced with such a complex context, what is the role of the State? Encourage citizens to perceive themselves as part of this great living system that is the planet Earth, starting with the adoption of an ecological ethic that recognizes the intrinsic value of the biotic and abiotic elements that make up the ecosystems, from which legitimate and democratic changes can be seen. In the exercise of state power, which will define and guide the exercise of the right to property and economic initiative, in accordance with this inalienable condition of [co] existence.

This is perhaps a close synthesis of the ethical presupposition of the Ecological State, a model developed by the German jurist Klaus Bosselmann, which presents, according to the level of knowledge we have today, an unsurpassed suitability for the sustainability ideal, precisely because it is the adoption of ecocentrism from a theoretical and transdisciplinary contribution that incorporated the answers of many fields of knowledge to the limitations of the modernization of modernity.

The objective of this work, therefore, is to present the ecocentric proposal of Klaus Bosselmann, in order to make possible new horizons for overcoming the ecological crisis now established. This is an exploratory and bibliographic study of a qualitative nature, divided into three parts: the first clarifies the emergence of the State of Environmental Law model, the second

reveals its unfolding, until the emergence of the And the third presents the ecocentrism that underlies this proposal.

2. An idea rises: the environmental rule of Law

The concept of Environmental State (*Umweltstaat*) started being developed in the end of the 1980s, in Germany, mainly under the auspices of Michael Kloepfer, among other researchers¹, from the perspective of the insertion of environmental protection as a basic goal in the constitutional law (JÄNICKE, 2006).

On the background of the broadening of awareness on the existence of an ecological crisis that has led to hazards to the environmental situation, Kloepfer (1994) found the starting point to rebut the constitutive elements of the State: wouldn't it be an anachronism to claim that the conditions for the survival of the State were, presently, reduced to the people, power and territory triad² ?

After all, the environmental quality "in and around its dominion" (free translation) is an indispensable feature to any political and social organization and, precisely for that, becomes worthy of particular care to the extent of justifying the creation of a new theoretical model that includes this demand to the basic structure of the State (KLOEPFER, 2010, p. 40).

Indeed, it is verifiable that this is a legitimate concern, not only from environmentalists, but also from the civil society as a whole and, as it should be, taken in by Law, Political Science, State Theory and Constitutional Theory scholars.

Such it is, that, not coincidentally, by glancing through the works of contemporary authors in these fields of study, it is noticeable that the struggle against the environmental degradation phenomena is commonly

¹ Such as Ernst Forsthoff and Hasso Hofman.

² As it is known, there is a recurrent thought, in the field of Political Sciences, that brands these three elements as constitutive to the State. Besides those ones, it bears mentioning the finalist schools, which add the finality element. Cf: Jellinek, 1905.

mentioned as one of the greatest challenges in the beginning of the 21st century to the established state orders³.

Thus, recognizing the insufficiency of the instruments then existing for the environmental protection in Germany, Michael Kloepfer (2010, p. 43) stated the need for the political community to pursue the setup of “a State that makes the safety of the environment its task, as well as the criterion and procedural goal of its decisions” (free translation), which he denominates “Environmental State” (*Umweltstaat*).

When thinking up the foundation of his environmentally oriented State and assuring its sustenance, Kloepfer observed some challenges to overcome related to the intertemporal feature of environmental damages. For him, there is no way to ignore the fact that a relevant part of the present issues are due to undesirable reminiscences of past actions or omissions. Besides, there are damaging situations caused by current events and, as if that were not enough, it is also necessary to count on potential future damages. Some of these will arise from already known risks, to which the counter-measures don't have immediate effect, and other ones will come from completely unknown risks.

Ergo, this overlay of damaging effects must be taken into account for an adequate scaling of the proper legal protection owed to the environment, without which, Kloepfer (2010) admits, environmental protection cannot be effective.

Therefore, it can be concluded, with a systematic study of this author's work, that for the achievement of an Environmental State, in general, it is required the incorporation of the following schedules to the State's domain:

The creation of a State duty to the protection of the environment deriving directly from the Constitution, which binds the Executive, Legislative and Judiciary functions, but can be directly extracted from the Constitution only when harming the essential core of the juridical protection of the environment, to ensure the minimal ecological existential. Such State

³ To illustrate this, two excerpts: the first one of Jorge Miranda (2007, p. 55): “Fourthly, and more important than all these events and these problems, we encounter, nevertheless, the degradation of nature and the environment, the economical inequalities between industrialized and non-industrialized countries, the situation of social exclusion even in the richest countries, the communicational manipulation, the mass consumption culture, the undercutting of certain family and political ethical values. How and how much will all of this rebound in the Constitutions?” (free translation); and the second one of Reinhold Zippelius (1997, p. 465): “The idea of the feasibility of life conditions, of the inevitability of provisions on the future, has been turned into a life sensation, dominant and progressively also distressful, of our time” (free translation).

protective duty must cover also the protection of nature for its own sake, and not only for man's sake, and the rights of future generations, who, even though they have no subjective rights of defense, must be saved through means of environmental planning, prevention and precaution against future risks and damages.

Beyond that, the protection *and monopoly in the regulation of use, access and utilization of natural assets* (including in face of the use of economic and tax instruments), which shall be considered community assets (public assets, "in the sense of freely accessible and serviceable" (free translation), though not unreservedly – scarce assets).

It is also included in this list the guarantee to the right of defense against environmental damages eventually caused by the State in the exercise of its sovereignty.

Additionally, it is identified the establishment of the prohibition of environmental regression, with the aim to guide mainly the legislator's action with the guarantee of the minimal maintenance of the current environmental protection levels.

Another demand essentially absorbed by this proposal is the employment of environmental awareness, education and information policies, to avoid the use of repressive instruments and consequential restriction of individuals' freedom.

With the aim to avoid severe restrictions or the stagnation of scientific activities derived from the preventive feature of the environmental State protection, the admission of residual risks was incorporated (those being understood as uncertainties "located below the threshold of practical reason" (free translation) – justified and organized based on the use of deliberation and proportionality techniques to evaluate, in concrete cases, the fundamental rights encumbered by the environment and the constitutional duty of protection of the latter (KLOEPFER, 2010, p. 47).

Although the State practices its protagonism, derived from the monopoly of power, the *establishment of cooperation with non-state sectors* is contemplated, those including individuals considered separately, as well as organized social groups, for being perceived as needful for the protection of the environment.

Moreover, by recognizing the cross-border aspect of environmental damages, it is also realized that *international cooperation and the need for participation in inter or supranational organisms* are indispensable.

In essence, Kloefer identifies the need to incorporate the protection of the environment among the goals of the State, doctrinal formulation which had great importance and raised wide practical repercussions, such as significant alterations in the German environmental constitutional Law and also reformulation of environmental policies as a whole in that country.

3. From the environmental state to the ecological state

Along nearly three decades since its formulation, the concept of Environmental State and the central idea that underlies it have grown popular and have been object of reflection for many theoreticians aligned to various hues of thought, which yielded, to the term in case, reinventions, reinterpretations, additions and developments, as is adverted by Martin Jänicke (2007).

It is in this context that, parallel to the idea of Environmental State, widely disseminated by foreign and Brazilian doctrines⁴, Klaus Bosselmann (1995) sets off to the theorization of another model: the Ecological State.

On behalf of the need of descriptive rigor and conceptual precision that must be present in the studies of Law and its institutions⁵, one should avoid confounding these lexicon and, therefore, its undue use, as if they were synonyms.

Concerning the expressions “Environmental State” and “Ecological State”, this warning is particularly noteworthy, since the choice for one over another may influence the understanding of the very distinctions between them, as well as cause an inadequate muddle among two significantly different theoretical models. As such, it is fundamental to disambiguate these concepts.

⁴ In foreign doctrines it is adopted, for example, by Michael Kloefer, in all the works cited here; JÄNICKE, Martin, *op.cit.*; e HOFMANN, Hasso. *Die Aufgaben des modernen Staates und der Umweltschutz*. In: KLOEPFER, Michael (Hrsg.). *Umweltstaat*. Berlin: Springer-Verlag, 1989. In Brazil, LEITE, José Rubens Morato. *Sociedade de risco e Estado*. In: CANOTILHO, José Joaquim Gomes (org.). *Direito constitucional ambiental brasileiro*. 3. ed. São Paulo: Saraiva, 2010.

⁵ This is one of the important lessons taught by Tércio Sampaio Ferraz Junior (1994, p. 34) to those who study the juridical phenomena in general, making the following analogy: “Jurists always take themselves to comprehend the Law as an universal phenomenon. In this sense, there are innumerable definitions that postulate this scope.[...] There is something human, withal cultural in this search. The chance to provide the essence of the phenomenon grants confidence to the study and to action. A complexity not reduced to uniform and nuclear aspects genders angst and seems to subtract us from the domination over the object. One who does not know where to start feels impotent and either does not start or starts unmotivated” (free translation).

First of all, those who use the word “environmental” do so meaning its broader sense ⁶ i.e., comprising multiple manifestations from the environment, according to a classification – traditionally accepted by the Brazilian doctrine ⁷ and jurisprudence ⁸ – which includes the natural or ecological dimension as one of the sides deserving of special protection⁹, besides the artificial, cultural and labor means.

Therefore, it is clear, under a first impression, the existence of a gender/species relationship between the aforementioned expressions. In this sense, José Joaquim Gomes Canotilho (2010; 2013) uses, preferably, the adjective “environmental” to refer to the model of State currently studied, although he often employs the combined use of the expressions “Environmental and Ecological State of Law” ¹⁰ (free translation) in his writings, in which he also aspires the implementation of what Rudolf Steinberg named Ecological Constitutional *State*¹¹.

Moreover, it is important to be alert to the fact that the differences between what is called “Environmental State” and “Ecological State” go

⁶ “In a strict view, the environment is nothing more than the expression of the natural heritage and the relations with and between living beings. This notion clearly disregards everything that does not relate to natural resources. In a broad concept that goes beyond the narrow limits set by the traditional Ecology, the environment consists in the entire original (natural) and artificial nature, as well as in the related cultural assets” (original emphasis) (free translation) (MILARÉ, 2011, p. 143).

⁷ “The division of the environment into its component aspects aims to facilitate the identification of the degrading activity and the immediately attacked asset. One cannot forget that the Environmental Law has as highest object of protection the healthy living, so that the classification only identifies the aspect of the environment in which higher values were debased. And, with that, we find at least four significant aspects: natural, artificial, cultural and work environment.” (original emphasis) (free translation) (FIORILLO, 2011, p. 73). It is noteworthy that the author identifies the digital environment as part of the cultural environment and also gives special emphasis to the protection of the genetic heritage.

⁸ STF. ADI 3.540. Min. Celso de Mello. Tribunal Pleno. DJ 03/02/2006.

⁹ Some authors (e.g. CARVALHO, 2008, p. 63) even recognize, under the legal protection of the environment “a greater prominence (observed in the constant use of terms such as ecosystem, ecology, etc.) of the “natural environment”, given that it is a direct condition for the healthy quality of life” (free translation).

¹⁰ “In the whole, the legal-environmental and legal-ecological dimensions make it possible to talk of an environmental and ecological rule of law” (original emphasis) (free translation) (CANOTILHO, 2010, p. 25).

¹¹ “The ecological constitutional State, within Steinberg’s acceptance, is characterized especially by active social participation and dialogue. [...] It is in this context of primacy of the social dialogue on environmental issues that not just the social order, but also the environmental condition becomes object of State decisions. [...] to Steinberg, the environment is protected in the Constitution especially by the procedure” (free translation) (HARTMANN, 2010, p. 29-30).

much further than the aspect brought up earlier, for they derive from diverse ethical assumptions¹².

As explained by Klaus Bosselmann (2012), while the Environmental State focuses on the human well-being, the Ecological State considers, simultaneously, the relevance of the human and the nature's well-being, recognizing the latter's intrinsic value, independently from the human condition, assigning, then, to the State, the duty to protect all forms of life. Thereafter, the differences between the two models are significant, not gradual and truly paradigmatic¹³.

The Environmental State's proposal is oriented by humanism or anthropocentrism on the premise that environmental protection measures focus on the threats and harms to humans beings.

However, the Environmental State does not defend a pure or economicocentric anthropocentrism¹⁴. In fact, it follows, up to a certain point, the evolutional movement of environmental regulations, incorporating two successive protection phases: the first one, protecting environmental interests as a human concern of current generations, reasoned by utilitarianism and the theory of human rights, and the second one, in which the interests of future generations are considered in the preservation of nature¹⁵.

Michael Kloepfer (2010, p. 43), himself, recognizes, since the beginning of his formulations, that the "egocentric principle of

¹² It bears explaining that it is possible to generically speak about the "Environmental Ethics" as a group of theoretical constructions which have as an object the relationship between human beings and nature, as well as to orient the actions directed at the environment. Contemporary investigations on this field are carried out on the plane of the Environmental Meta-Ethics, which aims at clarifying problems of a linguistic and epistemological character of the Environmental Ethics itself; and on the plane of the Environmental Normative Ethics, which aims to systematize principles and values to justify the relations between humans and non-humans. Yet, there are such various approaches that it is possible to speak of the existence of many environmental ethics, such as the consequentialist ethics, the deontological ethics, ethics based on virtues, pathocentrist ethics, bioregional ethics, communitarian ethics, the ethics of the land, deep ecology, among others. For all, see: ELLIOT, 2003; ROLSTON III, 2007; and ROBERT, 2003.

¹³ "The eco-constitutional state differs significantly from a state merely committed to the rule of law (Rechtsstaat), on the one hand, and environmental protection (Umweltstaat) on the other. Rather, both must be seen as mutually reinforcing and together defining the state. Such an integrating view in stark contrast to the traditional liberal idea of the state (perceived to be "neutral"). Most strikingly, the liberal concept of the rule of law/Rechtsstaat has its focus on the well-being of humans, whereas the ecological concept of the rule of law/Rechtsstaat has its focus on the well-being of humans and nature. The difference between both models is not merely gradual, but paradigmatic (...)" (BOSSELMANN, 2012, p. 23).

¹⁴ i.e. "one that protects the environment [merely] for the economic value it presents to the productive activity of the members of current and future generations" (SOARES, 2001, p. 42). (free translation)

¹⁵ The third phase would be the rise of the non-anthropocentric paradigm (EMMENEGER; TSCHENTSCHER, 1994, p. 545-592).

environmental protection” (free translation) has long been overcome, which, in other words, renders it possible to speak of an extended or mitigated anthropocentrism¹⁶, i.e. one that does not break with the human protagonism as in the illuminist way, but opens new perspectives for the recognition of the environment’s intrinsic value in a *macro-environmental theory-based approach*¹⁷.

According to José Rubens Morato Leite (2010, p. 157):

the “enlargement” of this [anthropocentric] vision [...] lies precisely on considerations which regard ideas of environmental autonomy as a requisite for the guarantee of survival of the human species itself. Here, the environment is not considered as a passport for the accumulation of riches, rather being understood as elementary for the dignified human life. (Free Translation)

Morato Leite (2010, p. 160) defends this stand as reasonable and, at least, pragmatically and provisionally adequate to the Law, which is a human phenomenon and aims the attainment of human values, among which the development of economic activities has long since occupied a major position, “[...] considered by many as the reason of existence of the State and the Law itself” (free translation), thus, in his opinion, being “understandable that the environment is still, for legal effects, hostage of economic necessities” (free translation).

Ivar Hartmann (2010, p. 32) had a similar opinion when advocating, through a review of the contractarian theories, that the security and fulfillment of human fundamental rights remain as the final goals in the

¹⁶ In the foreign doctrine, it is identified, parallel to the existence of a deep anthropocentrism (“deep anthropocentrism – [which] does not see non-human as important in absolute terms, and only in thin instrumental terms is non-human nature considered relatively important. For the deep anthropocentric, nature, unlike anthropocentric environmentalism, is excised utterly from society. For the deep anthropocentrist, humanity is the center of concern and the analysis of the environment is predicated on human welfare”), the description of a “soft anthropocentrism” in the following terms: “The argument of ‘soft’ anthropocentrism holds that economic development is by no means pursued at the expense of the environment or the interests of future generations, and recognizes that people live in other places at other times. However, this remains an anthropocentric view as the interest in protecting the environment is a human-centered one, apparently non-egocentric but nevertheless configured in instrumentalist terms” (STRONGMAN, 2008, online).

¹⁷ “The environment considered in itself (macro-environmental theory-based approach) is a common good, being unavailable regardless of the legal property regime (public or private). This view, presented in numerous international treaties (Treaty of Stockholm in 1972 and Rio Declaration of 1992, for example) and Brazilian legislations [...] emphasizes the importance of the environment as a value in itself, in addition to the tangible elements that it comprises (microassets)” (free translation) (CARVALHO, 2008, p. 67).

model of Environmental State, not included, among its objectives, environmental preservation. Still according to the author, this perspective would not hinder the recognition of nature's intrinsic value, neither of the position in it on which man stands. Next, the researcher makes clear his affiliation to what he calls "enlightened anthropocentrism", in which safeguarding the environment is not an objective, but one of the conditions for legitimacy of the State.

On the other hand, the conception of the Ecological State assumes an *ecocentric* ethical orientation, i.e. it denies man's central position before the nature around him.

4. Ecocentrism and the attribution of intrinsic value to nature as an ethical fundament of the Ecological State and sustainability

Klaus Bosselmann (1995, p. 7) explains that ecocentrism emerged in the 1980s decade from concerns about the aggravation of the ecological crisis, being then considered that the latter's main causes derived from man's selfish and self-centered behavior – generated and propagated throughout over 2,500 years of prevalence of the European culture, philosophy, economy, production method, science and theology – and, also, from the realization that the proposals and measures based on anthropocentrism have been inefficient in reversing the complex setting of environmental damages provoked by this world view¹⁸.

The term is broadly employed by the author because, according to himself, of the lack of more appropriate terminology regarding a plethora of more or less comprehensive non-anthropocentric ethical currents, such as pathocentrism, biocentrism and holism or physiocentrism.

The first one was brought up by Jeremy Bentham. It defends that the criteria for the attribution of moral obligations towards a non-human being must be based on the latter's capacity to feel pain and suffering. Such obligations, however, may be put into perspective in face of their utility for the greatest number of humans. Based on this initial idea, Peter Singer founded the *Abolitionist approach*. Bosselmann (1995) recognizes the importance of these contributions, but he considers them to be very limited in their range.

¹⁸ This reasoning is very close to that developed by Boaventura de Sousa Santos (1999), which leads him to see that the environmental crisis that we witness today, in fact, is also a civilizational crisis.

Biocentrism, in its turn, deems all living beings as having intrinsic value and aims to preserve their lives. This set of theories is ruled by the principle of equally considering all beings' interest of keeping alive, although most authors admit gradations between different life forms and establish criteria to solve interspecific conflicts of interests, some of which Bosselmann accepts, as will be later discussed.

Finally, the holistic strands transcend the issue of mere attribution of intrinsic value to living or non-living beings, actually considering the environment as a whole. As Bosselmann explains, it does not mean that those adept of this view think that a human being and a grain of sand should be equally considered, but it prevents disregarding the inorganic elements in a given situation. Some advocates of this perspective are Aldo Leopold (*The Land Ethic*), Albert Schweitzer (profound respect for all life), Arne Naess (*Deep Ecology*), Maturana and Varela (theory of the autopoiesis of living systems), among others. Bosselmann incorporates ideas from many of these thinkers and does not consider them to be contradictory between each other, as he explained in personal correspondence with this researcher (2013).

In short, ecocentrism has four main objections towards anthropocentrism (BOSSELMANN, 1995, p. 139). The first one is for considering the latter's empirical description of the natural reality as inappropriate. According to the latest scientific investigations, human beings are not in the center of the universe, are not biologically different from other forms of life, are not, also, in their psychologic and social aspects, completely

different or superior to animals and are not exempt from the evolutionary process.¹⁹

The second one relates to the fact that the anthropocentric conduct, reflected particularly by capitalism²⁰, as economic system, and industrialism, as production method, would have led to a disastrous and generalized level of environmental degradation, widely reported by the American scientist Rachel Carson,²¹ still in the years 1960, and by so many studies published by scientists from various fields of knowledge until the present days.

¹⁹ In this sense, it is appropriate to bring some provocations by Felipe Fernández-Armesto (2007, p. 14-15), a historian and researcher at the University of Oxford, on the current difficulties in determining the concept of the human being because of evidences from various branches of knowledge, such as Linguistics, Neuroscience, Genetics, Paleoanthropology, Robotics, among others. The following is an excerpt for illustration purposes: "The current limits of our concept of humanity are not obvious and are not universal. They were established as a product of an arduous and protracted battle in the Western world to find a way to understand the humanity that encompassed communities previously excluded by racism and ethnocentrism, while insisting on a clear distinction between human and non-human beings. In the present state of the debate, and in the light of available knowledge, this seems ever more to be an incomplete and perhaps unfeasible search. It is not the time for a conclusive and comprehensive study on the matter. [...] The fact that we take our concept of humanity as natural is, for me, cause for concern: it is a form of complacency that makes us ill-equipped to face the challenges. It is suspicious, moreover, that we make the mistake of thinking that the concept does not need to be further extended. [...] The paleoanthropologists who want to include more hominids in the category, the primatologists who want to retrace the limits of the Homo genus in favor of chimpanzees, the moralists who deplore the exclusion of the unborn and the dying from some human rights are all, in their own way, seeking to broaden the limits of the concept: it can still reveal a surprising elasticity. [...] It seems that we never stopped being monkeys; but we wish to be angels. To what point have we actually come on the evolutionary road? How far do we need to go before being genuinely included in the entire human community and reaching a viable border between humans and the others? Maybe the search is bound to be endless, since all scientific progress blurs distinctions that were once convincing" (free translation).

²⁰ There are also studies which list environmental damages and disasters that occurred during the socialist experiments, which would have been relevant in the collapse of the regime in virtually all Eastern European countries, with the exception of Romania and Yugoslavia (DELLAPENNA, 2010, p. 50-76).

²¹ In the book "Silent Spring", Carson (2010, p. 65) has the merit of systematically pointing out the various harmful effects of the project of nature domination undertaken by humans in modern times, previously partially perceived by scientists in the restricted spheres of their specialties. The author approaches from the contamination of water, soil and air, even in the most remote places, to the loss of biodiversity of plants, birds, insects and large animals in general, explaining in each of these cases the irreversible ecological imbalances then observed. She also reports that this process was significantly intensified from the indiscriminate use of hazardous chemicals. As seen: "The water, the soil and the earth's green mantle formed by plants constitute the world that supports the animal life on our planet. Although modern men hardly remember this fact, they could not exist without the plants that capture the sun's energy and produce the basic food they depend on to live. Our attitude toward plants is singularly narrow. If we see any immediate utility in a plant, we cultivate it. If, for any reason, we find their presence undesirable, or if it is indifferent to us, we can immediately condemn it to destruction. In addition to the various plants that are poisonous to humans or domestic animals, or that dislodge the food plants, many are condemned to destruction just because, according to our narrow view, they happen to be in the wrong place at the wrong time. Many others are destroyed because they had the misfortune to be associated with unwanted plants. The terrestrial vegetation is part of a web of life in which there are intimate and essential relations between plants and the Earth, between plants and other plants, between plants and animals. Sometimes we have no choice and are forced to disrupt these relationships, but we must do it carefully, fully aware that what we do can have consequences far away in time and space. But this humility is not a feature of the prosperous businesses [...] of present days (...)" (free translation)

Besides that, the anthropocentric ethics defies logic, as it is not able to gauge rationally consistent criteria to defend human superiority to the detriment of other forms of life. That is so, according to Bosselmann (1995, p. 141), because the parameters often applied for that – e.g. consciousness, volition, communicational and self-evaluation capabilities – would lead to the exemption from responsibility towards groups such as the intellectually disabled, babies, unborn children, the elderly and people in state of temporary or permanent coma, while it should behoove humans with the privileged skills of intact cognition a safely diverse conduct of inclusion and preservation.

Lastly, the fourth restriction accredits a dogmatic character to anthropocentrism, as it disregards – explicitly or, sometimes, automatically – any possibility of rupture from this line of thought. That is due to a limitation of perception of the human potential as beings endowed with freedom of thought, action and transformation of their own conscience, in an individual or social level.

Therefore, ecocentrism encompasses a system of non-anthropocentric values, emphasizing the need to reevaluate the position occupied by human beings before the systemic and interrelational reality of the diverse forms of life.

This was established from a saturation in the development of the natural sciences according to the paradigm of modernity, based on specialty, objectivity, linearity, the rigid dualistic and dichotomic separation between subject and object of knowledge, which gave signs of exhaustion in different fields of knowledge²².

That model's limitations to understand the interactions and phenomena between living beings gradually become noticeable. With the rise of Ecology, nature is no longer interpreted as a bundle of useful or useless resources, but rather looked upon as an organic whole, as a complex dynamic system of interdependent individual lives.

Facing this new context, it is proposed the attribution of intrinsic value to the non-humans, recognizing that all this range of living beings has the right to exist and continue existing; that the history of over three billion years

²² Boaventura de Sousa Santos (1988) accurately describes these constituent elements of what he calls the paradigm of modernity, as well as the reasons that led this model to crisis and, finally, indicates the features required for a postmodern science, which he called an emerging paradigm.

of movement, adapting and transformation of living beings will not be disregarded (MATURANA; VARELA, 2001, p. 270).

In terms proposed by *The Land Ethic*, written by Aldo Leopold, one of the authors from whom Klaus Bosselmann (2012) declaredly inspires his proposal of the Ecological State, the environmental protection derives from the recognition of the Earth as a multispecies biotic community. As its components, human beings own respect towards all other integrants, considering that “the inhabitants of this Earth – people, animals, plants – are literally a community sharing a common fate” (BOSELMMANN, 1995, p.281) (free translation).

However, it is not a manifest for the annihilation of the ethics directed towards human relations²³, nor an overvaluation of nature to the detriment of humanity’s own infirmities, such as wealth concentration, hunger and poverty.

In this regard, Bosselmann (1995, p. 20) goes as far as to categorically affirm that “social injustice are always also an ecological one” (free translation). Thus, it is defended that the confrontation to satisfy such matters will only be possible in a jointly manner.

It is, thus, outlined an evolutionist perspective of ethics, in which the ecological duties towards non-humans are added to the already existent social dimensions of ethical action (CALLICOTT, 2003).

This does not mean that to this group of thinkers the entitlement to the protection of life, to the well-being and to the integrity of humans and non-humans should be the same, based on the same measure, from which derives the need to think up criteria for the weighing between human and non-human interests.

The land ethic is based on the leopoldian aphorism that “something is right when it tends to preserve the integrity, stability and beauty of the biotic community; it is wrong when it has the opposite tendency” (free translation), which’s application is based on two Second Order Principles – SOP developed by J. Baird Callicott (2003, p. 221), one of Leopold’s main followers.

As enunciated by the SOP-1, “the obligations generated by belonging as a member to more revered and intimate communities have precedence over the ones generated in more impersonal communities and that have

²³ “Similarly, it is also evident [...] to Leopold and his representatives [...] that the duties that come with citizenship in the biotic community (to preserve its integrity, stability and beauty) do not override or supersede the duties that accompany a member of the global human village (to respect the human rights)” (free translation) (CALLICOTT, 2003, p. 220).

emerged more recently” (free translation); the SOP-2, in its turn, states that: “stronger interests [...] originate duties that have precedence over duties originated by weaker interests” (free translation).

Callicott exemplifies how these principles should be applied with a case exposed and inadequately solved by one of the land ethics’ critics: the dilemma of the centenary forest, in which a citizen wants to know how to opine in a referendum to decide on the preservation of a four centuries old forest.

If deforestation were allowed, a threatened species of owl would be extinct; if the area were preserved, about ten thousand lumberjacks that would work in the area would suffer economic impacts.

According to the solution offered by the critic, based on the above mentioned principles, in any way the vote should be against protecting the forest, which is justified by the closer bonds with human beings.

In return, Callicott (2003, p. 222) identifies the flaw in his opposer’s argument, who fails to apply the second order principle (SOP-2), in the following terms:

the choice is between tearing down 400 years old trees, thus causing the extinction of the mottled owl and destroying the centenary forest’s biotic community, in one hand, and the displacement of forest workers within an economy that is already displacing them through automation and exportation of raw logs to Japan and other foreign markets. And the lifestyle of the centenary forest’s lumberjacks is condemned, anyhow, to self-destruction, because it will meet its end in the “final solution” for the centenary forest issue, if the lumber barons in riding boots (who disingenuously blame the mottled owl for the economic insecurity of lumberjacks and other workers of the logging industry) continue to do whatever pleases them. With the SOP-2 supplementing the SOP-1, the land ethics direction is crystal-clear for the exemplar dilemma exposed by Varner and is opposite to the one that Varner, applying only the SOP-1, affirms it advises. (free translation)

The interpretation of these principles may be enriched from visions proposed by Psychoanalysis, particularly by intellectuals who were related

to the Vienna Circle, as was Arne Naess²⁴, who, revising Sigmund Freud's studies, concluded that the comprehension on the human conscience's level of perception of its own self was limited²⁵ and should, actually, be extended to the society and all living beings.

In other words, the subject transcends itself; as it practices its otherness, it identifies itself with that which is exterior and from this it develops affective relationships, thus opening the paths to surpass an alienated and sectioned vision of the human existence (BOSSELMANN, 1995).

Hence, immersing deeper into these questions, we realize that, in fact, those interests which were considered to be counterposed and, for that reason, were subjected to the above mentioned technical judgment, are revealed to be closer to each other than one could initially think.

Consequently, the difficulties to apply these principles and the risks of interpretative distortions, such as the one that Callicott refuted, would be reduced.

Still on the matter of criteria to valuate human interventions in the natural world, Bosselmann (1995, p. 192) enunciates a general rule: "The more severe and the longer-lasting a planned intrusion will be, the higher must be the demands on the interests that justify the intrusion" –.

To make his thinking clear, the author pictures this premise with an example relative to human alimentation: for being essential to life, it is a primary interest; however, the ways by which it can be obtained, which involve aspects such as pleasure and convenience, are secondary interests that should be carefully balanced in face of environmental protection.

Now, the need for adequate nutrition is not denied to the human being; yet, it does not mean that one should quench it in whatever manner. In this way, some practices are considered unjustifiable, such as: large scale animal creation with hormone added feeding, agricultural production through monocultures making use of agrochemicals or genetically modified seeds, considering the pollution and the decrement in biodiversity they cause.

²⁴ The founder of the Deep Ecology, an ethical branch that is based on seven principles: "i) a metaphysics of inter-relationship; ii) an ethos of biospheric egalitarianism; iii) the values of diversity and symbiosis; iv) an anti-class stand; v) the opposition to pollution and resource depletion; vi) the value of complexity; and vii) an emphasis on local autonomy and decentralization" (free translation) (MATHEWS, 2003, p. 227).

²⁵ Actually, language and cognition themselves are not individually described, either, but rather as interactive processes among humans and their surroundings. See: Bosselmann, 1995, p. 193.

Finally, Bosselmann (1995) commends the application of one additional method to aid the resolution of conflicts between nature's and humans' intrinsic values. It is a model developed by the New Zealander researcher Graeme Scott (1986, online)²⁶, which recognizes the existence of a scale of values involving nature's interests, ordered by their complexity and contribution to the continuity of vital interrelational processes.

Furthermore, there is also a scale for humans' values, in which costs and benefits of possible interferences in the environment are measured. The judgment that directs the decision of making or not a modification in nature and, when applicable, the terms in which it should occur, would be made through reading and combining these two scales of interests, with three possibilities: a) when nature preservation brings only benefits, thus being unallowable any alteration in its components in any way that may bring them harm; b) when interventions bring chances of high environmental impacts and limited benefits for human beings. In this case, to judge on the reasonability of interference in this area, two conditions would have to be considered: that its ecologic consequences are predictable and that society accepts the responsibility to compensate its negative effects; c) when modifications are acceptable, considering they benefit human beings with significantly low impacts to the ecologic equilibrium.

For all these methods for judgment of human and non-human interests to have the expected effect on the political decision-making, the approximation to the set of systematic knowledge, regarding the complex physical-chemical-biologic interactions in the ecosystems involved in each case, is indispensable.

Also, the habits and common knowledge of traditional populations bear great importance, for these human groups accumulate significant experience of harmonic co-existing with their surrounding environments, in such a way that their relationship of belonging is ontological (WHITT et al., 2003).

5. Conclusion

²⁶ In his doctoral thesis on Environmental Education, Scott discusses a number of issues relevant to the implementation of effective Environmental Education policies. Among them, he discusses concepts, curriculum guidelines and methods for the Environmental Education, in which are highlighted the approach of difficult environmental problems and the need for awareness of students to interpret reality and seek befitting solutions.

It is, finally, perceived that the attempts to build the ecocentrism as an ethic and theoretical paradigm are necessary because they have the power to provoke deep reflections about human nature itself and its position in space, from a reconnection with the past, through the remembrance of old habits and behaviors that survived for generations, or, in other way, made generations survive for generations; and, from this, drive us to look into the future, when they demand that rationality be employed in a critical, pervious, non-Cartesian and non-linear fashion, allowing our limits and perspectives of existence as civilization, as organized political collectivity, to be questioned, but not letting us neglect our condition as permanent members of a biotic and abiotic community on which we depend entirely.

It can be seen that this is an extremely complex proposal, whose full realization, in fact, is not yet apparent in the current stage of civilization.

This could be a generic criticism to the proposed program: that it would be a naive and unworkable utopia. To that, however, many theoretical models also do not escape, not even democracy itself, as said by Rousseau as an unreachable entity.

And even so it is not unrecognized the value of the democratic experiences, much less of fighting for the improvement of its institutions. The same reasoning can be applied to this case.

Hence the first challenge to the acceptance and pursue of the implementation of an Ecological State or some of its guidelines, especially in a society whose hallmark is the consolidation of the neoliberal economic globalization, the disbelief in great transformations, the pessimism about the future, the loss of meaning of things, as denounced some members of the Frankfurt School, is the need to overcome the disbelief or even the disqualification through the ridicule that this proposal, particularly because it is grounded on ecocentrism, is liable to suffer by its opponents, even in the face of so much evidence from various areas of contemporary science that lead to the consideration of its reasonableness.

For such, there needs to be a rescue of hope, of utopia, of the capacity of human beings to rebuild their communities and recognize the essential links with other beings, and thus change their *modus vivendi* through the exercise of a new rationality.

6. References

BOSELMMANN, Klaus. **When two worlds collide: Society and Ecology**. Auckland: RSVP Publishing Company Limited, 1995.

BOSELMMANN, Klaus. Grounding the Rule of Law – In memoriam of Staffan Westerlund. **Speech at the Rule of Law for Nature – Environmental Law Conference**. University of Oslo, Oslo, Norway, 2012. Keynotes pressed by University of Oslo, May 2012.

BOSELMMANN, Klaus. Re: Contact – Brazilian PhD Student [personal message]. Message received by <emailastela@gmail.com>, on jun 1st 2013.

CALLICOTT, J. Baird. A ética da terra. In: JAMIESON, Dave (Coord.). **Manual de Filosofia do Ambiente**. Lisboa: Instituto Piaget, 2003.

CANOTILHO, José Joaquim Gomes. Direito constitucional ambiental português e da União Europeia. In: CANOTILHO, José Joaquim Gomes; LEITE, José Rubens Morato (org.). **Direito constitucional ambiental brasileiro**. 3. ed. São Paulo: Saraiva, 2010.

CANOTILHO, José Joaquim Gomes. O princípio da sustentabilidade como princípio estruturante do Direito Constitucional. **Tékhnê**, Barcelos, n. 13, jun. 2010. Available on: <http://www.scielo.gpeari.mctes.pt/scielo.php?script=sci_arttext&pid=S1645-99112010000100002&lng=pt&nrm=iso>. Accessed on: mar. 13, 2013.

CARSON, Rachel. **Primavera silenciosa**. São Paulo: Gaia, 2010.

CARVALHO, Delton Winter de. A formação sistêmica do sentido jurídico de meio ambiente. **Revista Lusíada – Direito e Ambiente**. Lisboa, n. 1, p. 55-70, out./dez. 2008.

DELLAPENNA, Joseph W. Behind the red curtain: environmental concerns and the fall of communism. In: ENGEL, Ronald J.; WESTRA, Laura; BOSELMMANN, Klaus (ed.). **Democracy, ecological integrity and international law**. Cambridge: Cambridge Scholars Publishing, 2010.

ELLIOT, Robert. Ética normativa. In: JAMIESON, Dale (Coord.). **Manual de filosofia do ambiente**. Lisboa: Instituto Piaget, 2003.

EMMENEGER, Susan; TSCHENTSCHER, Axel. Taking Nature's Rights Seriously: The long way to Biocentrism in Environmental Law. **Georgetown International Environmental Law Journal VI**, 1994, p. 545-592.

FERNÁNDEZ-ARMESTO, Felipe. **Então você pensa que é humano?** Uma breve história da humanidade. São Paulo: Companhia das Letras, 2007.

FERRAZ JUNIOR, Tercio Sampaio. **Introdução ao estudo do Direito**: técnica, decisão, dominação. 2. ed. São Paulo: Atlas, 1994.

FIORILLO, Celso Antonio Pacheco. **Curso de Direito Ambiental Brasileiro**. 12. ed. rev. atual. e ampl. São Paulo: Saraiva, 2011.

HARTMANN, Ivar Alberto Martins. **Ecodemocracia**: a proteção do meio ambiente no ciberespaço. Porto Alegre: Livraria do Advogado, 2010.

JÄNICKE, Martin. The Environment State and Environmental Flows: The Need to Reinvent the Nation-State. In: SPAARGAREN, Gert; MOL, Arthur P. J.; BUTTEL, Frederick H (ed.). **Governing Environmental Flows**: Global Challenges to Social Theory. Cambridge: MIT Press, 2006, p. 83-107.

JELLINEK, Georg. **Teoria general del Estado**, 1905.

KLOEPFER, Michael. Is There a Threat of an Authoritharian Ecological State? **European Energy and Environmental Law Review**. v. 3, apr. 1994, p. 112-115.

KLOEPFER, Michael. A caminho do Estado Ambiental? A transformação do sistema político e econômico da República Federal da Alemanha através da proteção ambiental especialmente desde a perspectiva da ciência jurídica. In: SARLET, Ingo Wolfgang (org.). **Estado Socioambiental e Direitos Fundamentais**. Porto Alegre: Livraria do Advogado, 2010.

LEITE, José Rubens Morato. Sociedade de risco e Estado. In: CANOTILHO, José Joaquim Gomes; LEITE, José Rubens Morato (org.). **Direito constitucional ambiental brasileiro**. 3. ed. São Paulo: Saraiva, 2010.

MATHEWS, Freya. Ecologia Profunda. In: JAMIESON, Dale. **Manual de filosofia do ambiente**. Lisboa: Instituto Piaget, 2003.

MATURANA, Humberto R.; VARELA, Francisco J. **A árvore do conhecimento**: as bases biológicas da compreensão humana. São Paulo: Palas Athena, 2001.

MILARÉ, Édis. **Direito do Ambiente**: Gestão ambiental em foco. Doutrina. Jurisprudência. Glossário. 7. ed. rev. atual. ref. São Paulo: Revista dos Tribunais, 2011.

MIRANDA, Jorge. **Teoria do Estado e da Constituição**. Rio de Janeiro: Forense, 2007.
ROBERT. Ética normativa. In: JAMIESON, Dale (Coord.). **Manual de filosofia do ambiente**. Lisboa: Instituto Piaget, 2003.

ROLSTON III, Holmes. Ética Ambiental. In: BUNNIN, N.; TSUI-JAMES, E.P. (Orgs.). **Compêndio de filosofia**. São Paulo: Loyola, 2007.

ROUSSEAU, Jean-Jacques. **O Contrato Social**: princípios do direito político. São Paulo: Martins Fontes, 2006.

SANTOS, Boaventura de Sousa. **Pela mão de Alice**: o social e o político na pós-modernidade. 7. ed. Porto: Afrontamento, 1999.

SANTOS, Boaventura de Sousa. **Um discurso sobre as ciências**. Porto: Afrontamento, 1988.

SANTOS, Milton. **Por uma outra globalização**: do pensamento único à consciência universal. 19. ed. Rio de Janeiro: Record, 2010.

SCOTT, Graeme. **School based environmental education in New Zealand**: conceptual issues and policy implications. Thesis (Doctor of Philosophy in Resource Management). University of Canterbury. Christchurch, 1986. Available on: <http://ir.canterbury.ac.nz/bitstream/10092/4782/1/scott_thesis_vol1.pdf>. Accessed on: Dec 30, 2013.

SOARES, Claudia Alexandra Dias. **O imposto ecológico**: Contributo para os instrumentos económicos de defesa do ambiente. Coimbra: Coimbra Editora, 2001.

STRONGMAN, Luke. **The anthropomorphic bias**: How human thinking is prone to be self-referential. The Open Polytechnic of New Zealand, Working Paper n. 4-07, 2008, p. 14 and p. 18. Available on: <<http://www.openpolytechnic.ac.nz/assets/Marketing/Research/Current-working-papers/anthropomorphicbias.pdf>>. Accessed on: mar. 2013.

VIEIRA, Liszt. Constituição e meio ambiente: As raízes e o sonho... In: PÁDUA, José Augusto (org.). **Ecologia e política no Brasil**. Rio de Janeiro: Espaço e Tempo, 1987.

WHITT, Laurie Anne; ROBERTS, Mere; NORMANN, Waerete; GRIEVES, Vicki. Perspectivas indígenas. In: JAMIESON, Dale (Coord.). **Manual de filosofia do ambiente**. Lisboa: Instituto Piaget, 2003.

ZIPPELIUS, Reinhold. **Teoria geral do Estado**. 3. ed. Lisboa: Fundação Calouste Gulbenkian, 1997.