

## CLIMATE ETHICS AND ANALYTICAL CATEGORIES: THEORETICAL NORMATIVE POTENTIAL FOR POLICY-MAKERS

*Ética climática e categorias analíticas: Potencial Teórico-Normativo Para  
Formuladores De Políticas*

*Ética climática y categorías analíticas: potencial teórico-normativo para  
políticas socioambientales*

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### ABSTRACT

Climate ethics is one emerging force that has entered in the climate policy making arena. Different actors are proposing several policies for adapting and mitigating global warming. Recent research reveals that the current climate instruments are based mainly on technological and economic solutions, and more, they disregard or make invisible biogeocentric ethical principles. This article seeks to present the emerging of climate ethics within the latent theoretical field and its normative power. The methodological path adopted was through a qualitative approach, with systematic bibliographic review, documentary research and content analysis. In the first part of the article, the ontological rupture between the social and the natural is presented in the socio-climatic perspective. It also demonstrates how anthropocentric ethical principles are associated with the devastation of Nature, as well as they are being mobilized by strategies like negationism and techno-salvationism in climate policies. In the second part, I discuss the morality of the normative elements of this emerging ethics. In the third part, a synthesis of the analytical categories of the emerging climate ethics is presented. I conclude by presenting the real potential for both theoretical expansion of the field of climate ethics and normative categories for use in the processes of formulating climate policies.

**Keywords:** Climate Ethics; Socio-environmental Justice; Anthropocene; Climate Policies.

### RESUMO

A ética climática é uma emergente força que entrou na arena das formulações de políticas de adaptação e mitigação do aquecimento global. Pesquisas recentes revelam que os atuais instrumentos climáticos são pautados majoritariamente por soluções tecnológicas ou econômicas, e desconsideram ou invisibilizam princípios éticos biogeocêntricos. Este artigo busca apresentar a emergente ética climática e a potência normativa das suas categorias analíticas para formulação de políticas climáticas. O caminho metodológico adotado foi por meio de uma abordagem qualitativa, com revisão bibliográfica sistemática, pesquisa documental e análise de conteúdo. Na primeira parte do artigo é apresentada a ruptura ontológica entre o social e o natural na perspectiva socioclimática. Também é apresentado como os

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princípios éticos antropocêntricos estão associados à devastação da Natureza, assim como são mobilizados por estratégias de negacionismo e tecno salvacionismo na formulação de políticas climáticas. Na segunda parte, debato a moralidade dos elementos normativos da ética na perspectiva climática. Na terceira parte é apresentado o conjunto das categorias analíticas da emergente ética climática. As considerações finais remetem à potencialidade da expansão teórica do campo da ética climática, da ampliação normativa das categorias e da aplicação nos processos de formulação de políticas climáticas.

**Palavras-chave:** Ética Climática; Justiça Socioambiental; Antropoceno; Políticas Climáticas.

## RESUMEN

La ética climática es una de las fuerzas que han entrado en la arena de la formulación de políticas para adaptar y mitigar el calentamiento global. Investigaciones recientes revelan que los instrumentos climáticos actuales se basan principalmente en soluciones tecnológicas y económicas, ya que desconocen o invisibilizan los principios éticos biogeocéntricos. Este artículo busca presentar el surgimiento de la ética climática dentro del campo teórico latente y su poder normativo. El camino metodológico adoptado fue a través de un enfoque cualitativo, con revisión bibliográfica sistemática, investigación documental y análisis de contenido. En la primera parte del artículo se presenta la ruptura ontológica entre lo social y lo natural en la perspectiva socioclimática. También demuestra cómo los principios éticos antropocéntricos se asocian con la devastación de la Naturaleza, además de ser movilizados por estrategias de negacionismo y tecno-salvacionismo en la formulación de políticas climáticas. En la segunda parte, discuto la moralidad de los elementos normativos de esta ética emergente. En la tercera parte, se presenta una síntesis de las categorías analíticas de la ética climática emergente. Concluyo presentando el potencial real para la expansión teórica del campo de la ética climática y las categorías normativas para su uso en los procesos de formulación de políticas climáticas.

**Palabras-clave:** Ética climática; Justicia Socioambiental; Antropoceno; Política climática.

## 1 INTRODUCTION

This direction to save the planet →  
(REBELLION, 2019, p.5, protest graffiti made by climate activists)

Humanity lives in an era of increases. Increase in the temperature of planet Earth, catastrophic events, pandemics, the world population, the number of people who suffer from hunger and malnutrition, social and environmental inequities, among others. For a portion of humanity, it is necessary to curb such increases.

In the contemporary climate context, a plurality of agents begins to emerge in the political arena, such as organized civil society groups that have ethical principles different from anthropocentric ones, called biogeocentric ones, and demand alternative policies.

Transitions from the status quo can or should be built in the political arena, guided by ethical principles. However, such principles are little revealed in the formulation of policies, including climate change. In addition to the complexity of these processes, climate policies

have two challenging objectives: to simultaneously reduce global warming and socio-environmental inequalities.

The formulation of climate policies is an emerging topic in some fields of science. The social sciences contribute by bringing discussions such as socio-environmental justice, energy democracy and climate ethics. Moral sociology and political ecology are examples of fields that study, in other objects, the relationship between cosmovision, ethical principles and political action. In this article, the emphasis is on understanding ethics and its categories in the light of climate policies.

### 1.1 Anthropocene and climate policies

Since the beginning of industrialization, “planet Earth has been warmed by approximately 1°C compared to pre-industrial levels.<sup>1</sup>” (IPCC, 2018, p.4). In the last 100 years, the world population has increased from 2 to 7.8 billion people, and if the growth rate is maintained unchanged, humanity will have 15 billion people in 2100 (UN, 2019). Hunger and malnutrition currently affect more than 1 billion people and pandemics increase the social, environmental and economic inequities of these most vulnerable populations (FAO et al., 2020).

The natural phenomenon (global warming) has its origin in the social (mankind's way of production and life). Despite the scientific consensus that human beings were the causative agent of this phenomenon (IPCC, 2018), humanity continues to move towards the apocalyptic horizon of global warming that will lead to the annihilation of the human species and many other species. Some already extinct in the last 100 years out of the face of Earth due to the still increasing global warming.

This is the anthropocene era.<sup>2</sup> An era that demands solutions. And formulate effective coping solutions to avoid rising greenhouse gas emissions (GEE) is a contemporary imperative that permeates the ethical-political duty. In this perspective, the climate issue is fundamentally an ethical issue (GARDINER, 2017).

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<sup>1</sup> The pre-industrial era is usually defined as the breaking point between the agricultural and industrial era. This time period is marked by the invention of the steam engine in the 1750s.

<sup>2</sup> The term Anthropocene was coined by Nobel Prize winner Paul Crutzen in 2000, despite its informal use a decade earlier by himself. The term climate ethics was consolidated at the turn of 2010, with similar terms in use, such as global ethics, global warming ethics, planetary ethics, among others (GARDINER, 2017).

However, radical partisan polarizations such as the rise of the extreme right in several nation-states, moral conflicts between denialists and scientists, appearances of pandemics, syndemics<sup>3</sup> and infodemics<sup>4</sup>, among other events, make up the political ethical context that is observed in societies around the planet. Yes, the Earth is not flat.

Guided by an anthropocentric logic, historical divisions, such as the separation between society and Nature, observed in the dispute between the urban world with its megacities versus the ecological world with its natural ecosystems, between the humanities versus the hard sciences, or even between science versus religion, that tension the present (HARAWAY, 2016; DI GIULIO et al., 2019; FLEURY; MIGUEL; TADDEI, 2019; LEZAMA, 2019; INTERNACIONAL CONVIVALISTA, 2020). Splits that increase the challenge of 'com-living' of multispecies in a common space, the Earth.

The formulation of biogeocentric-based policies to face global warming and socio-environmental inequalities, with normative elements of climate ethics, is one of the demands of contemporary civil society. Organizations such as Extinction Rebellion, Sunrise Movement and Engajamundo demand socioecologically oriented solutions to face the climate emergency (INVISIÇÃO, 2018; REBELLION, 2019; THUNBERG, 2020; ENGAJAMUNDO, 2021). A few scientific voices cite the ethical imperative and moral obligation to curb global warming (TREMMELE; ROBINSON, 2014; GARDINER, 2017; OTTO et al., 2020; SETHI et al., 2020).

In the context of this article, the phenomenon of global warming is understood as a non-human entity<sup>5</sup> of multilevel tentacles<sup>6</sup> that affect multispecies in the multiple spatialities of a common planet. Effects generated unevenly, but in planetary scale<sup>7</sup>. Recent movements call for climate justice and socio-climate equity in an interrelated way. An alert

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<sup>3</sup> Term recently proposed to highlight the interdependence of multiple planetary crises, including: hunger, COVID-19 and global warming (SWINBURN et al., 2019)

<sup>4</sup> Term used to name the fake news pandemic in the digital world and which appears in the document of the European Commission (EC). The EC presented the instrument to face the climate crisis called Next Generation EU (EC, 2020).

<sup>5</sup> In this context I use the term convivalists to show the agency of non-human forces, which can be other living beings, human constructions or even institutions and planned systems. (COSTA, 2019; CONVIVALIST INTERNATIONAL, 2020)

<sup>6</sup> I use the term tentacles as a way of presenting the forces of non-human entities that operate at multilevels and multiscales in relation to humans and other human entities. (HARAWAY, 2016)

<sup>7</sup> The convivalists (ADLOFF, 2019; COSTA, 2019; INTERNACIONAL CONVIVALISTA, 2020) use the term non-human entities, which they can relate to the term hyperobject by Morton (2018) to associate and better understand the question of scale of a non-human entity.

from organized civil society was made to the international political leadership: “after 2 years of strikes for the climate, we are still in a state of denial of the climate crisis” (THUNBERG, 2020).

## 1.2 Methodology

The methodological route was based on a qualitative approach through a systematic bibliographic review, documentary research and content analysis (BARDIN, 2008).

The collection phase was instrumentalized by a systematic bibliographic review by articles with descriptors: socio-environmental ethics, socio-environmental moralities, anthropocene and climate policies. The database was Google Scholar and the search period was concentrated in the period from July 2019 to December 2020.<sup>8</sup>

For the article selection phase, concepts were identified from the theoretical perspective of moral sociology, political philosophy and political ecology, with climate as a sociological issue. The theoretical framework of convivialism was used to map ethics and moralities in the climate perspective. As complementary content organizers, NVIVO 12, Mendeley Desktop 1.19 and Foxit 10 were used.

For the analytical phase, content analysis was used in order to identify the elementary units associated with climate ethics and socioecological moralities, such as spatial justice, social equity, energy democracy, autonomous territoriality, distribution of benefits, ecological transition and other similar descriptors present in theoretical aspects in the context of climate policy formulation processes.

In the first part of this article<sup>9</sup> I present the genesis of the rupture between the social and the natural, and how the current sociopolitical vision maintains and intensifies this separation through strategies such as climate denialism (LACROIX; GIFFORD, 2018; ABDENUR; KUELE; AMORIM, 2019) and economic techno-salvation (LATOUCHE, 2009; FARAN; OLSSON, 2018; KOTHARI et al., 2019; PAYNE, 2020). In the second part, I analyze ethics and its foundations as an intrinsic dimension in the dialogue between the

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<sup>8</sup> Initially, 238 articles were identified, 80 were selected secondarily by correlating the primary descriptors, and later, after the final sensitivity analysis with the secondary descriptors (elementary units), the most relevant ones were selected to compose this work.

<sup>9</sup> This article is the result of one of the stages of the research project on ethics and climate policies from a sociological perspective. This project is funded by CNPq and is also part of Component 5 - Socioeconomic and political impacts of the AmazonFACE Program.

social and the natural, and its relationship with the political dimension. In the third part, I present the result of what can be understood as a set of analytical categories of the emerging climate ethics with normative potential for application by policy makers.

## **2 THE CRISIS BETWEEN THE SOCIAL AND THE NATURAL**

### **2.1 From the split to the search for dialogue between the social and the natural**

Considering the human being as a geological force on Earth is to focus on human actions as an influential and determining factor in the effects on ecosystems at different scales (MITMAN; ARMIERO; EMMETT, 2017). Some contemporary thinkers have sought to include the natural in social relations as a way to expand the rigid epistemological boundaries of society-Nature (HARAWAY, 2016A; COSTA; BRAND, 2018; GUDYNAS, 2019). Since the dawn of industrial times, anthropocentric principles have influenced the human way of life, just as they have objectified Nature (FLORIT, 2019; INTERNACIONAL CONVIVIALISTA, 2020).

The dialogue between the natural and the social world was broken for good in the early 1900s. The founders of a new science, sociology, also had their contributions from this divorce. Marx, Weber and Durkheim materialized, in a way, the cosmivision of the society of their times, removing the natural from the social equation (LEZAMA, 2019). Such rupture remains in contemporary scientific discussions.

Interdisciplinarity is a path to be followed in the pursuit of this integration, but the challenge is urgent in the face of an emergency - climate change - which impels us to make decisions quickly before the point of no return.<sup>10</sup>

The origin of such a split was analyzed by Lezama (2019) and concluded that such social thinkers carry out a 'double exclusion, ontological and epistemological'. As the author explains, 'for Marx, nature is not an explanatory factor of the social order' and demonstrates that the exploitation of labor power is the heart of the capitalist production process, but without including the natural as a determining factor of the social.

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<sup>10</sup> Climatologists' projections show that if the Earth's average temperature, in relation to the pre-industrial era, exceeds 2° C, the point of no return will be reached, that is, the effects on ecosystems become irreversible, possibly leading to the sixth extinction in mass of the planet. (CEBALLOS; EHRlich; DIRZO, 2017; IPCC, 2018; OTTO et al., 2020)

Thus, in a similar way 'for Weber, nature lacks meaning, reducing it to the world of irrationality', and therefore submitting it in an instrumental and functional way to the industrial model as a means and not as an end in itself. Still according to Lezama (2019) for Durkheim that he is the most "conclusive, clear, precise and definitive in relation to the exclusion of the natural in his explanation of the social order, and more, the exclusion of nature is a necessary condition, explicitly indicated, for the constitution of sociology" (p.223).

However, at the same time as these founders of classical sociology, there was a philosopher-sociologist, Georg Simmel, who had a perspective "marked by an 'ecological' view of the emerging urban environment [early 20th century], which ends up demarcating an interpretation of the sociability manifested in modern and urban everyday life, of interactions, groups and emotions" (MOCELIN, 2017, p.79). Simmel's ecological view refers to the moral perspective of normative action integrated with Nature, that is, a mediation between the rationalization of economic growth at the time and the human values that guide their actions in their environments for a good life without annihilating the other. However, the neoliberal anthropocentric cosmovision was consolidated.

Such rupture reached modernity, and after more than a hundred years it remains and has repercussions<sup>11</sup> in the contemporary world of the new millennium (INVISIÇÃO, 2018). These effects can be seen in socio-environmental conflicts and disasters on planetary scales.

In this sense, the applied human sciences and the so-called hard sciences have found it difficult to ontologically shift the human being from the center of the dialogue, whether 'from the social' or 'the natural' (HARAWAY, 2016) and to have a more integral and interdisciplinary vision necessary to address current contemporary challenges such as climate change (FLEURY; MIGUEL; TADDEI, 2019).

Challenges that lie in the reflective and normative planes. In the political arena, the dialogue between the social and the natural remains a challenge, even more so when the natural has psychic representations of the reflexive plane and social developments in lived praxis. Lacroix and Gifford (2018) identified in their groups of researched individuals some psychosocial components - when it comes to their relationships with the climate crisis -:

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<sup>11</sup> Giddens (1991) at the end of the last millennium brings this critique of the harmful action of the social on the natural in the formulation of a list of dangers to Nature (atomic waste, chemical pollution, greenhouse effect, destruction of forests, among others) with a warning: "The sheer amount of serious risks linked to 'socialized nature' is quite frightening" (p.114).

denial, ignorance, techno-salvation<sup>12</sup>, conflict between immediate and future aspirations, restriction of action due to interpersonal influence and impossibility of exiting the crisis.

These components, when perceived as barriers to social action, change the level of intervention in their environments and, consequently, their effect on the natural environment. Thus, these groups model and reinforce their views of the world, feeding back their decisions and social actions in relation to nature.

Humanity, in its broadest sense, is still experiencing the effects of this rupture between the natural and the social, between society and Nature. A challenge that needs multifaceted approaches. And a look from the relationship between ethics and politics can shed light on the discussion.

## **2.2 Ethical-political views on the split between the social and the natural**

The discussion about the rupture of the social and the natural goes through ontoethical discussions<sup>13</sup> and politics, such as the construction of political narratives based on convivial, biogeocentric or anthropocentric ethics (SALMI, 2020) or the construction of socio-environmental policies and their effects on lived praxis (FLORIT, 2019).

In the context of the global warming phenomenon, when it comes to the political dimension, there are denialist groups (LACROIX; GIFFORD, 2018; ABDENUR; KUELE; AMORIM, 2019) and other interventionists (SETHI et al., 2020). Both act on various scales with actions that are guided by some kind of normative system, governed by ethical-principles - that generate effects both in the social and in the natural in an interdependent way (LACROIX; GIFFORD, 2018; OTTO et al., 2020).

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<sup>12</sup> Technosalvation is a term used by some fields, such as political ecology and ecological economics, as a critique of the developmental model that operates solely on economic logic and frames technology as the only viable solution to planetary crises. It is also a critique of anthropocentric ethics, which are based on this logic, that human technology is capable of providing solutions to any type of challenge, even in the climate issue. More in LATOUCHE, 2009; KOTHARI et al., 2019; PAYNE, 2020

<sup>13</sup> This article does not propose to discuss the climate issue from an ontological perspective, despite its relationship with ethical and political dimensions. Here, I limit myself to the relationship between ethics and politics. The term ontoethics is used in this context to signal the relationship between ontological and ethical dimensions.



For those who deny the data and information produced by science in the last 50 years<sup>14</sup> on global warming (LACROIX; GIFFORD, 2018), the productivist system and the current social order must be maintained based on capitalist logic and the moral belief that technological advancement maintains and improves the current social order (FARAN; OLSSON, 2018). For capitalists, the use of negation as an instrument to guide human action in relation to the planet is based on the interest of maintaining or even accelerate current levels of capital accumulation through high consumption, high obsolescence and increasingly intense production to maintain humanity's way of life LATOUCHE, 2009; FARMER, 2017; INVISIBLE, 2018; REBELLION, 2019).

For techno-salvationists, who share the same productivist and developmentalist logic, the current model of high consumption and high obsolescence (FARMER, 2017) is part of the construction process of the technological solution, even if humanity continues to generate more and more solid waste, liquids and gases, because technological salvation is on the horizon of this type of morality.

I briefly present two sociological currents<sup>15</sup> in dialogue with the exploration of the planet's natural elements, convivialism and neoliberalism. The latter in operation in the contemporary world is considered one of the driving forces of the climate crisis.

The convivialist current, roughly speaking, recognizes that neoliberalism is the dominant cosmovision, and that this is guided by anthropocentric principles, such as the domination of the other and the unlimited exploration of nature, as well as a stimulus to individualism and unrestricted freedom, fostering a competition of all against all. Thinkers of this line argue that a humanity that lives guided by biogeocentric principles, such as multispecies solidarity cooperation and coexistence in common spaces, without massacre the other, is possible to have it built. (CONVIVIALIST INTERNATIONAL, 2020).

The neoliberal current argues that salvation will come through technological evolution and that it is necessary to continue to extract natural resources to subsidize investments in technological solutions, the so-called techno-salvation (FARAN; OLSSON, 2018; KOTHARI

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<sup>14</sup> In 1972, the Club of Rome produced one of the documents (The Limits to Growth) which is considered one of the main points of ecological political reference on human action and its decisive interference on the planet

<sup>15</sup> This article was limited to addressing neoliberalism, as it is the dominant worldview, and convivialism, which is an emerging current that seeks to be an alternative to communism, socialism and anarchism (INTERNACIONAL CONVIVIALISTA, 2020).

et al., 2019; PAYNE, 2020). Anthropocentric ethics with its extractive logic keeps encouraging the use of fossil energy (oil, coal and gas) and fissile (nuclear) energy.

Payne (2020) found that the United States continues to encourage the use of fossil fuels operationalized by political logic that is still associated with the economic objectives of the past decade, that is, constant economic growth. A neoliberal logic that is based on unlimited exploitation. Technosalvation as a political response and moral perspective to face the climate crisis is one of the strategies of neoliberalism. The coping with crises goes through several dimensions, including the ethics and politics.

The colonization process is based on the principle of domination, oppression, exploitation and devastation of resources appropriated by force (MARTINS, 2019). The global economy is seen by neoliberals as a logic to be implemented homogeneously in a world of heterogeneous societies. A neoliberalism that acts on economic principles<sup>16</sup> and not by socio-environmental or climate principles (CHOMSKY; POLLIN, 2020).

In another movement of neoliberalism, denialists stress, as they seek another type of intervention, also with an economic bias, and therefore question whether there is a crisis (LACROIX; GIFFORD, 2018). Furthermore, they deny it based on economic reasons of unlimited growth based on a productivist economic morality, either to generate more capital and/or to maintain domination over others, including natural resources (ABDENUR; KUELE; AMORIM, 2019).

One might question whether, in addition to the climate crisis, there is an ongoing planetary ethical crisis. Negotiators can deny the analyzed data and results produced over the last few decades by the scientific community, but the moral considerations, the current world order and the decision-making bases of economic formulators and political leaders, can be discussed in the light of climate ethics.

Other currents of thought seek to question neoliberal logic and bring to the table, for example, processes of decolonization or postcolonial epistemic construction.<sup>17</sup> in the lands

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<sup>16</sup> On the neoliberal logic and its relationship between politics and the climate crisis based on the strategies of economic interest groups in the processes of formulating policies of the 'new green deal' type, which allude to being guided by biogeocentric principles, but mask anthropocentric principles, see CHOMSKY; POLLIN, 2020.

<sup>17</sup> PHMartins (2019) analyzes the use of the term postcolonial by assuming it as the term closest to the epistemology necessary to present the construction of a new arena of knowledge after the colonization period, that is, after the period of domination by the other.

of the Global South (BLANCO-WELLS; GÜNTHER, 2019; MARTINS, 2019) as the well-being of Andean peoples that is guided by harmony between humans and Nature.

Alternative proposals from civil society, such as the Extinction Rebellion climate movement led by Greta Thunberg, also emerge as ways to overcome neoliberalism and its autocratic-dominating character. A political reform, for example, with the adoption of a direct decision-making system, “a system where there is self-governance [...] known by various terms, such as direct democracy, mass democracy, municipalism, anarchism” (ROSS, 2019, p. .180). The basic idea is that individuals or groups can make their own local decisions that affect them directly and transparently within a shared and direct decision-making model (ACOSTA; BRAND, 2018; GUDYNAS, 2019), but the “tension between man in nature and man in society” continues today (MOCELIN, 2017, p.141).

In academic and political discussions about models and political initiatives to curb global warming, the technological and economic dimension is overwhelmingly present, taking over almost all<sup>18</sup> of climate policies (SHETI et al., 2020). I argue that it is not a matter of intervening or not, but of how to carry out such intervention. And the ethical dimension in the climate perspective can shed light on how to carry out such policy interventions.

### **3 (I)MORALITY AS A NORMATIVE ELEMENT IN THE CONSTRUCTION PROCESS OF CLIMATE ETHICS CATEGORIES**

There is a robust body of scientific knowledge that demonstrates that society is neither ahistorical nor aterritorial, and that the attitudes of individuals or groups are neither apolitical nor amoral. Humans are historical, territorial, political, and moral. Thus, an interdisciplinary approach is necessary (HARAWAY, 2016; COSTA, 2019; INTERNACIONAL CONVIVIALISTA, 2020) to identify and organize the analytical categories of the emerging climate ethics. In this section, the clipping focuses on morality and its relationship with climate ethics. As I explain below in more detail, morality, in this context, is understood as action oriented in the world from an ethical principle. Oriented action can be

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<sup>18</sup> Of the 867 proposals to face the climate crisis researched by Sethi et al. (2020) 41 proposals focused on mitigating the emission of greenhouse gases were selected, and of these 93% contained a technological orientation and the remainder (7%) with a social orientation. Among the social solutions, there is the increase in urban green areas (parks). But no reference to moral factors or ethical principles as elements of political intervention. (SETHI et al., 2020).

observed in praxis. And a set of actions can be observed in a standardized way, for example, in climate policies. Thus, I remind you that every policy is guided by ethical principles.

### 3.1 Ethics in Aristotle and Kant: bases for the ethics of the new millennium

Here I briefly present the difference between ethics and morals. I assume the ethics<sup>19</sup>(of Aristotle's *grego éthè*, livelyhood (384-322 BC), the deontological imperative (from the Greek *deonta*, duty) of Kant (1724-1804), and the moral components<sup>20</sup> (from the Latin *mores*, customs, manners) as starting points<sup>21</sup> until reaching climate ethics and its socio-environmental moralities.

These concepts - ethics and morals - are unfolded from a duty to be in the world. The ethical imperative and its moralities have implications for 'ways of inhabiting the world' and effects on coping with global warming.

Ethics for Aristotle is both related to the philosophical duty (deontological) and to everyday life (*praxis lived*), in a reflective relationship between means (*praxis*) and ends (duty), with happiness (*eudemonia*, good life) as a permanent state to be experienced in everyday life, as a simultaneous 'middle and end', and not a utopian destiny. These actions oriented in lived *praxis* are also called moralities (RICOEUR, 1992 [1990]). Thus, ethical principles such as justice, moderation and generosity are elements that must be exercised in the lived *praxis* (VANDENBERGHE, 2018), that is, to lead a good life with and for the other in institutions<sup>22</sup>, through fair and justifiable agreements (RICOEUR, 1992 [1990]; BOLTANSKI, 2006 [1991]).

When unfolding ethics into moral components, there is a pragmatic realization of the duty to act in the world. Kant (2007 [1786]) elaborates his conception of ethics<sup>23</sup> from a normative view of acting in the world based on ethical principles and moral duties that can be universalized for oneself and for the other. The Kantian Imperative<sup>24</sup> it has a normative

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<sup>19</sup> Aristotle's "Nicomachean Ethics" is the work that underlies the first notions that were registered in the Western world about ethics, which denotes the current split also between the West/East, as well as other epistemologies such as the Global North/South, and which can be explored in future work.

<sup>20</sup> With rare exceptions, outside the philosophical field, the terms ethics and morals are treated as synonyms.

<sup>21</sup> The theoretical approach of Paul Ricoeur (1992 [1990]) is the choice used for this starting point.

<sup>22</sup> The concept of institutions is also understood as social structures (RICOEUR, 1992 [1990])

<sup>23</sup> Kant's notion of ethics is also known as the Kantian imperative or moral imperative.

<sup>24</sup> 'Kantian imperative' and 'categorical imperative' are synonyms in philosophical terms.

character of the ought to be in the world, by stating: “The categorical imperative [...] only acts according to a maxim such that you can at the same time will that it becomes a universal law” (Id., p.59).

Baptista (2011) is categorical in summarizing how the duty to be is intrinsic to the human being and, therefore, defining their social actions, when he argues that, “the human being is a reflective and normative being par excellence and, as such, is a being that evaluates” (Id., p.7).

For example, when evaluating risks and rewards in the climate issue, human beings decide and act according to some moral norms and this action generates effects in various dimensions of life, individual and collective, in the short and long term (FARAN; OLSSON, 2018 ).

By extending the human-centered Aristotelian ethical notion of the good life to the inclusion of Nature, and expanding the Kantian ethical notion to the ecological perspective, we have the field of socio-environmental ethics<sup>25</sup>(FLORIT, 2019) and by expanding this to the level of a common humanity and on a planetary scale, we have the field of climate ethics (GARDINER, 2017; INTERNACIONAL CONVIVALISTA, 2020).

Thus, the field that emerges called climate ethics comprises an ethics of a reflexive-normative nature that goes beyond the economic imperative, being guided by biogeocentric principles, such as ecosocial equity, intergenerational responsibility and reciprocity with Nature (LATOUCHE, 2009; TREMMEL; ROBINSON, 2014; LOPES, 2019; INTERNACIONAL CONVIVALISTA, 2020; OTTO et al., 2020).

In summary, what subjectively inhabits the human being has a reflective, structural and structuring relationship with the way of perceiving and living in the world objectively. Overcoming the theoretical-epistemic boundary between society and Nature is one of the premises of the emerging climate ethics.

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<sup>25</sup> Socio-environmental ethics [...] is understood as the field of reflection that forms an interface between environmental ethics and social studies of environmental inequalities. On the analytical level, it implies studying the social relations that result in the moral disregard of nature and non-human living beings, which, in the contemporary context, we tend to call objectification or objectification. On the normative level, it implies reconciling the moral consideration of these living beings with the affirmation of environmental justice among human beings. FLORIT, 2019, p.262

### 3.2 Ethics in the new millennium<sup>26</sup>: climate ethics

A planetary cosmovision generates biogeocentric ethical principles. The contemporary ethical duty (LOPES, 2019; INTERNACIONAL CONVIVALISTA, 2020; SETHI et al., 2020) unfolds into socio-ecological moral obligations with humanity, Nature and the Earth (TORRES et al., 2020; OTTO et al., 2020). These moralities lead to everyday oriented social actions with local materializations and global effects. Such actions generate effects, from short to long term. This relationship between ontoethics and political actions helps in understanding the world, both in understanding the mobilizing and generating forces of climate policies, as well as in understanding the spatial and temporal effects.

Anthropocene is just a term that reveals this relationship in motion. An anthropocentric cosmovision, which produces ethical principles of domination, induce a model of life based on the unlimited exploration of Nature (ACOSTA; BRAND, 2018). Currently, with the unlimited extraction and burning of fossil fuels (oil, gas and coal). Current nation-state policies allow humanity to extract every last drop of crude oil, just as they allow the deforestation of forests.

Climate ethics is directly related to the non-domination of the natural (Nature) by the social (humanity). Climate ethics, in its component of heterogeneous integration, places not only planet Earth, but all species, heterogeneous, in a relationship of equity in a socioclimatic perspective (TREMMELE; ROBINSON, 2014).

One of the emphases of climate ethics is to shift the center of political decisions based solely on the economic imperative (TORRES et al., 2020). The moral imperative of acting for the most vulnerable and for the climate must enter the political arena, with social contributions such as wealth distribution, social cohesion, health and peace, since "it is a moral obligation" (p.5) to face the global warming.

There is a recent term that has come to be included by science: 'syndemic'<sup>27</sup>. Understood as a synergy of pandemics: climate change, obesity and malnutrition. "Climate change can be considered a pandemic because its effects on human health and natural

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<sup>26</sup> The use of the term 'new millennium' is already a demarcating element of ontological differences. However, the purpose of this article is not to discuss different religious worldviews and their ethical and moral consequences on social praxis and policy formulation.

<sup>27</sup> Swinburn et al (2019) define 'syndemic' as the "synergy of pandemics' that co-occur across space and time, interact with each other to produce complex sequelae, and share common societal drivers." (p.791)

systems are interdependent [...] and it affects people in every country and region on the planet.” (SWINBURN et al., 2019, p.791).

A relationship that operates on a climatic moral basis requires a relationship of non-domination, of mutual integration without the annihilation of the other, whether human or non-human. When  $\frac{1}{5}$  of the global population is affected by the current economic system, hunger can be seen as immoral (SWINBURN et al., 2019), as well as the use of fossil energy and the worsening of the climate crisis (OTTO et al., 2020).

When hunger, malnutrition, morbid obesity, lack of schooling, definancialization are phenomena that occur on a planetary scale, placing the climate crisis and “the recognition of the immoral nature of fossil energies” (OTTO et al., 2020, p.2358) is to give an ethics perspective for structural phenomena that are generated by the social and not by the natural.

Ethics has a function that other dimensions do not have within their reach: provide moral considerations to human decisions and creations. In this way, hunger immoral when it generates the suffering of the other and is caused by planned structures or by the targeted (in)action of governments. The global hunger of approximately 1 billion people is a reality and can be avoided, as there are financial, technological and cultural resources for its eradication, but there is a lack of guiding actions, or moralities to direct economic resources through socially oriented policies (SWINBURN et al., 2019; DOWBOR, 2020).

After more than 10,000 years the human species is still slaughtering and annihilating its own kind, not to mention the species already extinct by the force of human activities<sup>28</sup>. There is a risk of humanity facing a sixth mass extinction (CEBALLOS; EHRLICH; DIRZO, 2017), but this time, unlike previous extinctions, it is humanity that is moving towards the abyss. The continuous demographic expansion, mega-metropolises, mega-slums, temporary-permanent refugee installations and transnational migrations are other phenomena that are also present in the new millennium (INTERNACIONAL CONVIVIALISTA, 2020).

A recent example of the relationship between ethics and climate is presented in the documentary 'A Grande Muralha Verde' (THE GREAT GREEN WALL, 2019) by showing the relationship between the climate crisis and the advancement of the desertification

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<sup>28</sup> The organization IUCN (International Union for Conservation of Nature) elaborates the 'Red List of Threatened Species' that monitors the species known to man and their stages of vulnerability, including risks of extinction. More at [www.iucnredlist.org](http://www.iucnredlist.org).

process, drastic reduction of water access to local communities, reduction of green areas and ecosystems, and their effects on populations, human and non-human, in several African countries from the Atlantic coast to the Persian Gulf coast. Migrations, hunger, malnutrition, exploitation of the forced slave labor, are not produced naturally. And the approach of climate ethics can shed new light on understanding such phenomena.

Finally, where there is massacre or annihilation of the other, exploitation or devastation of the natural, the climatic ethical frontier is verified, that is, the shattering in coexistence between the social and the natural, thus violence in all its aspects is the predominant component and there is climate immorality (ADLOFF, 2019; INTERNACIONAL CONVIVIALISTA, 2020).

In the next section, I present the set of categories of this emerging climate ethic, starting from the premise that these categories are interdependent. It is still an epistemic space under construction in view of the contemporaneity of the climate issue. Space that needs to be built in an interdisciplinary way. There is a need for a theoretical-normative approach that reveals and criticizes the status quo. This is one of the proposals of the analytical categories of climate ethics.

#### **4 A POTENTIAL SET OF CLIMATE ETHICS CATEGORIES**

With the objective of contributing to the discussion of the formulation of a climate ethics<sup>29</sup> (GARDINER, 2017; MARTINS, 2019; OTTO et al., 2020), I assume climate ethics from the concepts of good life from Aristotelian ethics, of duty to be in the world of the Kantian categorical imperative, from fair structures of Ricoeurian ethics and rewiring<sup>30</sup> between the social and the ecological. In this context, climate ethics is a moral posture of and in the present for the realization of social and ecological justice from political interventions within the critical horizon of feasibility, singular and collective well-being, without annihilation of the other, emphasizing the dignity of Nature.

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<sup>29</sup> I emphasize that the term biogeocentric ethics and climate ethics have similar understandings, and in the context of this article they can be understood as synonyms.

<sup>30</sup> The term reconnection is one of the possibilities, as it can range from the creation of bridges between fields of knowledge to the ontological overcoming of this social-Nature frontier. Here the theoretical approach of transition as proposed by political ecology is assumed.



#### 4.1 Consolidation of analytical categories of emerging climate ethics

Climate ethics can also be considered a normative instrument. Such normativity is presented in the construction and consolidation of the analytical categories presented below (Chart 01).

**Table 01** -Set of analytical categories of climate ethics

Analytical category	theoretical reference
Access to knowledge	LEMOS; KIRCHHOF; RAMPRASAD, 2012; DOWBOR, 2020.
Space-time affectivity	HARARI, 2018; KOEFOED; NEERGAARD; SIMONSEN, 2020.
Political agenda	TEIXEIRA; PESSOA; DI GIULIO, 2020; TORRES <i>et al.</i> , 2020.
Intergenerational benefit	TREMMELE; ROBINSON, 2014; GARDINER, 2017; LOPES, 2019
User-friendliness	ADLOFF, 2019; INTERNACIONAL CONVIVIALISTA, 2020.
Technological defossilization	LATOUCHE, 2009; FARMER, 2017.
Planned naturalness	INTERNACIONAL CONVIVIALISTA, 2020; UDOH <i>et al.</i> , 2020
Ecological reciprocity	GUDYNAS, 2019; INTERNACIONAL CONVIVIALISTA, 2020.
Material resources	COSTA, 2019; TORRES <i>et al.</i> , 2020.
Energy location	ACOAST; BRAND, 2018; GUDYNAS, 2020.
Decision-making plurality	FORST, 2016; ROSS, 2018; COSTA, 2019; MARTINS, 2019.

**Source:** Elaborated by the author (2020).

This set of analytical categories<sup>31</sup> associated with climate ethics can help reveal the rupture between the social and the natural, and consequently create bridges in the context of formulations of climate policies guided by biogeocentric principles. The social here is understood as an integrated cosmovision of the humanities<sup>32</sup> with other knowledge. The natural, that is, Nature, is understood as an entity worthy of value, deserving of moral consideration, and, therefore, with its own agency. For there to be a just transition, there must be moral components resulting from a biogeocentric ethics in coexistence, and transition, with the anthropocentric ethics (ATTERIDGE; STRAMBO, 2020; INTERNACIONAL CONVIVALISTA, 2020).

The reflexive relationship between moralities - anthropocentric and biogeocentric - is presented as moral or immoral<sup>33</sup>. In this case, immorality is presented, when in relation to the anthropocentric perspective, which demonstrates the friction and dispute between ethics and moralities in the political arena. Next, I present the analytical categories resulting from the emerging climate ethics.

I. Access to knowledge. Free forms of access to scientific and technological data and information on the climate crisis, as well as free access to green and blue spaces with biodiversity, mainly urban and peri-urban areas. If there is not access, because data, information or knowledge is blocked, is therefore immoral. (LEMOS; KIRCHHOF; RAMPRASAD, 2012; DOWBOR, 2020)

II. Space-time affectivity. Existence of loving spaces, care for the emotion/feeling of the other, generosity, based on Nietzschean *fati love* with attention to the elimination of violence between humans and non-humans; and future care with present actions. If there is no affection, because there is cruelty, and therefore it is immoral. (HARARI, 2018; KOEFOED; NEERGAARD; SIMONSEN, 2020)

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<sup>31</sup> The categories of analysis, in the context of climate ethics, are also understood as moral components, which, when grouped, form a set of moralities. More about the construction process, synonyms of terms, theoretical mobilization of categories, and other theoretical references in climate ethics: see SALMI, 2021.

<sup>32</sup> Caillé and Vandenberghe (2015) and Vandenberghe (2018) argue for the formation of an integrated and barrier-free science, which includes the ethical perspective and its moral components regarding the broader social discussion, when discussing the humanities sciences, such as anthropology, psychology, philosophy and sociology, among others, without epistemic barriers.

<sup>33</sup> In the context of this work, an action is considered immoral, when compared with an action guided by anthropocentric ethics. Action is considered moral when associated with an action guided by ethics, for example, anthropocentric, biogeocentric or climatic.

III. Political agenda. Existence of agendas and strategic plans of the rulers on the climate emergency and ecological transition for the effective confrontation of the climate crisis, as there are geopolitical controls at various levels. If there is no agenda, because there is 'denialism and/or misappropriation and/or unlimited and uncontrolled devastation', and therefore immoral. (TEIXEIRA; PESSOA; DI GIULIO, 2020; TORRES et al., 2020)

IV. Intergenerational (or intertemporal) benefit. Also known as (inter/trans) generational responsibility. Existence of mechanisms to verify the generation of results, such as redistribution of decision-making power by local communities, distribution of economic bonuses to more vulnerable communities, with such (re)distributions foreseen for the current and next generation. If the benefit is not designed to be achieved in this and the next generation, as continuity of transition results, it is generationally immoral (TREMMELE; ROBINSON, 2014; GARDINER, 2017).

V. User-friendliness. Existence of processes of human and non-human coexistence (nature) without mutual annihilation with generosity in living together. If there is no coexistence, because there is oppression and annihilation, and therefore it is immoral. (ADLOFF, 2019; INTERNACIONAL CONVIVIALISTA, 2020).

V. Technological defossilization. Existence of everyday use of low obsolescence technologies and planned waste generation in circular systems on a local and planetary scale. [If there is no durability, because there are 'unlimited resources', and therefore it is immoral. (LATOUCHE, 2009; FARMER, 2017)

VII. Planned nature. Existence of socio-spatial planning with elements from the analytical category of user-friendliness. If there are no spaces for coexistence between humans and non-humans, it is socioenvironmentally immoral. (INTERNACIONAL CONVIVIALISTA, 2020; UDOH; ESSIEN; ETTEH, 2020)

VIII. Ecological reciprocity. Existence of a 'withdraw/return equitably' relationship since Nature is seen as an entity worthy of moral consideration/condemnation. If there is no reciprocity, because there is imbalance and devastation, and therefore it is immoral (GUDYNAS, 2020; INTERNACIONAL CONVIVIALISTA, 2020)

IX. Availability of material resources. Existence of material resources, including financial and technological for local / regional climate transition. If there is no availability of resources, mainly financial, because there is necropolitics, ecocide and capital retention, it is therefore immoral. (COSTA, 2019; TORRES et al, 2020).

X. Energetic location. Also called energy democracy. Existence of energy generation and storage points within or close to territories and communities. It is about decentralizing the generation and use of energy for human enjoyment, without impacting other species and their habitats. If there is oligopoly and energy plants, because there is centralization of power, it is therefore immoral. (ACOSTA; BRAND, 2018; GUDYNAS, 2020)

XI. Decisive plurality. Existence of direct, participatory and transparent decision-making processes, based on the Kantian imperative, and which proposes to 'building worlds through one's own hands'. This is the right to 'co-determine structure'. If there is no participation and transparency, because there was no dialogue, but invisibility and domination, then it is immoral. (FORST, 2016; ROSS, 2018; COSTA, 2019; MARTINS, 2019).

I rescue here the consideration of the unique sociologist philosopher Georg Simmel about a type of sociality, the practice of a cosmic ethics of living the present as an end in itself (SIMMEL apud VANDENBERGHE, 2005). Aristotle, Simmel and current climate ethicists have something in common: practicing good living in the present as a means and an end in itself, with and for the other. A post-anthropocentric and post-neoliberal ethics (INTERNACIONAL CONVIVIALISTA, 2020), a post-colonial ethics necessary for the new millennium. A cosmic ethics that can lead humanity to overcome global warming and social inequalities.

If the climate crisis affects everyone, but in a different and unequal way, then the relationship with the generating factors and effects can be revealed through the ontological and ethical dimension (GARDINER, 2017). The theoretical categories proposed in this work demonstrate that instrumentalization for pragmatic use has enormous potential for public policy makers on climate and socio-environmental issues. Thus, climate ethics can be considered as an instrument for transforming the climate crisis through the capacity for 'human intervention within a real critical horizon'<sup>34</sup>.

Far from being conclusive, the theoretical and pragmatic potential of using the lens of climate ethics and the categories related here is enormous, both as a critical instrument for questioning the status quo and for building alternative and effective climate policies. An

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<sup>34</sup> Otto et al. 2020 conceptualizes eight elements of intervention as 'elements of social change' to face the climate crisis, including the 'system of values and norms' and within the normative characteristics that compose such elements are the horizons, one of them, the horizon of human intervention. horizon of decarbonization and horizon of intervention relevance.

approach demonstrated here that recognizes Nature as an active entity, possessing its own agency, and therefore worthy of value in its own right. Recognition necessary for the construction of new worlds to face the crises of this new millennium.

## 5 FINAL CONSIDERATIONS

This article sought to present the theoretical and normative potential of the emerging climate ethics. Theoretical, by framing ethics as a critical instrument of the status quo; and normative, when instrumentalized for application in the political dimension.

The potential for application in the issue process of the climate formulating policies is pragmatic and emergency, although it still requires a lot of study and research regarding the inclusion of other cosmovisions and biogeocentric principles.

The construction of policies involves, a priori, the choice of ethical principles. In the case of climate policies, what is at stake are ethical choices, between the dominant anthropocentric and the emerging climate ethics. Achieving pragmatic objectives, such as those of the Paris Agreement, is a global challenge that is permeated by this type of ethical choice.

The transformation is only carried out from the present, with decisions in and for the present with planned effects for future generations, which until now have been neglected. Understanding the ontology of the present and mobilizing an ethics of and for the good life with and for the other and Nature is a contemporary and urgent challenge.

I conclude that another world is possible, but from a climate perspective, the ontological and ethical dimensions are essential for just transitions and must be mobilized for worthy formulations of policies for the well-being of humans, Nature and the Earth.

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