

THE CONUNDRUM BETWEEN THE NEOLIBERAL RATIONALITY AND THE CONTEMPORARY ENVIRONMENTAL CRISIS: Fluctuations Through Uncertain Times

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ABSTRACT

The current investigation deals with the scope of the contemporary environmental crisis and its relationship with the neoliberal rationality. In this sense, the issue of such research comes up from the following questions: What is the future prognosis in the relationship between neoliberal rationality and the environmental crisis? What are the challenges to be faced and what measures and/or political-legal instruments should be proposed in an attempt to guarantee human dignity, environmental protection, economic growth and sustainability? The research's goals are can be summarized in the following premises: conceptualizing and contextualizing neoliberalism in contemporary society from the micro level – as the subject and the society – to macro levels – States; clarify future prognoses with neoliberal perspectives within the wake of new technologies as well as the transhumanism movements; comprehending the contemporary environmental crisis as a political phenomenon. The methodology applied in this research observes the hypothetical-deductive method. It's been observed that the neoliberalism paradigm abruptly intensifies environmental problems and it is necessary to find new ways and possible solutions to protect human and environmental rights.

Keywords: environmental law; human rights; neoliberalism; sustainability; transhumanism.

A DICOTOMIA ENTRE RACIONALIDADE NEOLIBERAL E CRISE AMBIENTAL CONTEMPORÂNEA: FLUTUAÇÕES NA ERA DAS INCERTEZAS

RESUMO

A presente investigação trata do tema da crise ambiental contemporânea a partir da racionalidade neoliberal. Nesse sentido, o problema da presente pesquisa dá-se a partir das seguintes indagações: Qual a prognóstico futuro na relação entre racionalidade neoliberal e crise ambiental? Quais os desafios a serem enfrentados e quais medidas e/ou instrumentos político-jurídicos devem ser propostos na tentativa de garantir a dignidade humana, proteção ao meio ambiente, crescimento econômico e sustentabilidade? Os objetivos são: conceitualizar e contextualizar o neoliberalismo na sociedade contemporânea desde as situações micro – como sujeito e sociedade – até as relações macro – Estados; esclarecer prognósticos futuros com perspectivas neoliberais dentro da esteira das novas tecnologias e movimentos trans humanistas; situar a crise ambiental contemporânea como um problema político. A metodologia utilizada nesta pesquisa segue o método hipotético-dedutivo. Endente-se que o neoliberalismo intensifica abruptamente as problemáticas ambientais, sendo necessário encontrar meios e soluções para proteção de direitos humanos e ambientais.

Palavras-chave: direito ambiental; direitos humanos; neoliberalismo; sustentabilidade; transhumanismo.

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1 INTRODUCTION

This investigation deals with the topic of the contemporary environmental crisis from the perspective of the neoliberal rationality. Taking into account that the main issues raised within the scenario of the environmental crisis such as large-scale pollution, scarcity of natural resources, wild life mass extinction, deforestation, wildfires, water pollution, conflicts raised due to environmental reasons, immigration, biopiracy, violence against indigenous people, global warming and climate change with catastrophic and devastating consequences for human beings, society and the entire planet. Issues caused by the unrestrained action generated by the neoliberal way of thinking, in one hand, are responsible to increase the dichotomy between the unprecedented global economic growth, and at the other hand, the magnified social inequality, violations of human rights as well as environmental rights.

On this conjuncture, the research's main theme comes from the following questions: What is the future prognosis in the relationship between the neoliberal rationality and the environmental crisis that the entire planet has been currently facing? What challenges must be faced and what measures and/or political-legal instruments should be proposed as an attempt to effectively guarantee human dignity, environmental protection, sustainability and economic growth?

The research's justification has been given in light of the worrisome future prognosis of the planet and human survival and its consequent discussions, debates and reflections around the world in a try to find new and alternative ways to cope with the issue. Furthermore, the present investigation, theoretically contributes to expand new glimpses within the Environmental Law and Human Rights spectrum.

Likewise, the current research is additionally beneficial to the social realm. In this milieu, it is worth noting that environmental issues such as climate change have already been occurring at an accelerated rate, causing significant impacts worldwide, through a myriad of catastrophic events, with the potential to even threaten human survivability.

The main goals of this investigation have been distributed in the following depiction: to conceptualize and contextualize neoliberalism in the contemporary society from a micro level – such as the subject and the society – to the macro level – relating to the nation States; clarify the future prognoses embedded within the neoliberal perspectives along with the awake of new technologies that are coming up and its correlation to the transhumanism concept; to foreshadow the current environmental crisis as a political problem.

With reference to the methodology of this research, it's been selected and adopted the hypothetical-deductive model of analysis which essentially embodies a bibliographical review by books, scientific journals, articles as well as the consultation of all sorts of documents available on the Internet. It's been observed that the neoliberalism paradigm abruptly intensifies environmental problems and it is imperative to find new ways and possible solutions to protect the planet's future.

2 THE NEOLIBERAL RATIONALITY IN THE 21ST SOCIETY

In the 21st society, it has been highlighted that the neoliberal paradigm has become the predominant rationality worldwide, not limited and/or perceived solely on the economic

scale, but spreading itself into something emphatically totalizing, that means, “[...] create a world in its own image through its power to integrate all dimensions of human existence. A global rationality, it is at the same time a ‘world-reason’” (Dardot; Laval, 2013).

Through this framework, entrepreneurial governance redefines the entire world from the micro level to the macro level, commanding global economic relations, thoroughly transforming the 21st society and remodeling human subjectivity – based on the reconceptualization of the individual’s behavior, emerging into a new type of control - a control that comes out from the individual’s own sense of freedom -, where the individual becomes the victim and inquisitor of himself – in today’s context, the employee and employer of himself, simultaneously (Han, 2015b).

Therefore,

[...] neoliberal rationality produces the subject it requires by deploying the means of governing him so that he really does conduct himself as an entity in a competition, who must maximize his results by exposing himself to risks and taking full responsibility for possible failures. “Enterprise” is thus the name to be given to self-government in the neoliberal age. This “entrepreneurial self-government” is something other, and much more, than the “enterprise culture” (Dardot; Laval, 2013).

In other words, neoliberalism is not glimpsed only as an economic theory, but rather as the dominant rationality that penetrates into Politics, Law, Education, Psychology, Religion, etc, “[...] proposing a sort of individualization based on the business model. A life that has to be learned, directed and evaluated like a business company.” (Safatle; Junior; Dunker, 2021, p. 11, our translation). From this point forward, the individual automatically becomes a self-entrepreneur.

In this context, Neoliberalism represents the introduction of a paradigm that typically references to the ones found in the business markets but now it has been transliterated and spread out to all the domains of life, and as a result, it ends up reassembling the entire social body based this new category of normative paradigm – which, by the way, that is the normative paradigm that comes right from the business market model. More specifically, it implies and requires that society as a whole along with all its societal relationships should function as if they were a business company. Obviously, that doesn’t have to do with the idea of privatizing everything but, in contrary, it infers into proclaiming and adopting the business market paradigm into all facets of existence. Nonetheless, the neoliberal way of thinking has modified almost everything into private property, that is to say, into commodities, the logic of the capital¹ (Hardt; Negri, 2009).

With the emergence and the immediate raise of new technologies, the neoliberal rationality began to run through this area in its fullness. Even though some authors interpret technological advances as something positive for human life, it is still clear that such arguments are not enough to justify an array of inconveniences, incongruences and problems. For instance, authors such as Steven Pinker (2019), believes and affirms that in the 21st,

¹ The word *commodities* has been referenced within the Negri and Hardt’s theoretical framework, that is, the idea of the common good.

humanity is currently experiencing a time in which it has never reached such a high level of progress and, as a consequence, people became happier, healthier, they live longer than their ancestors, society has advanced towards equal rights, democracy, information, security etc. By this argument, it is possible to summarize that the condition of the current world is very good.

Despite the relative veracity of Pinker's line of reasoning, such perspectives are still questionable. Thus, a considerable number of facts must be taken into account to better grasp the era of consumerism and its association with neoliberal rationality – besides the remodeling of the neoliberal individual in the 21st society. A few years ago, the Italian author Domenico de Masi, in two of his well-known books, namely, *O Futuro do Trabalho* (1999) and *O Ócio Criativo* (2000) – both books written and published in the Portuguese Edition, respectively meaning *The Future of Work* and *Creative Leisure* through a free translation -, also optimized and recognized the raise of new technologies as a genuine advancement to humanity that would mainly manifest itself by granting humankind a considerable increase in free time by consistently reducing the amount of time dedicated to work.

However, a couple of years later, Masi (2022), came up with a completely different proposition in his latest book *O trabalho no século XXI: Fadiga, ócio e criatividade na sociedade pós-industrial* (2022) – once again, only accessible through a Portuguese Edition but it stands for *Labor in the 21st century: Fatigue, leisure and creativity in the post-industrial society* – where he emphasizes the paradox that has been currently revealed by a logic of alienation though the remote work promoted by advances in technology – especially the developments in communication and virtual technologies, where much of what has been written in the book comes from the context of the Covid-19 pandemic, a time that has been characterized by the world's population massive use of digital platforms and communication technologies as alternative ways of carrying out their work, activities, jobs, careers, professions and studies.

With a similar frame of reference, the American author Jonathan Crary (2013), pinpoints that all this technological apparatus instead of making people's lives and work easier, ends up creating discomforts and generating more problems. From his perspective forward, one of the purposes of the capitalist system is to overcome the sleep barrier itself, that is, the idea of extinguishing the natural biological process of sleep so that people do not waste time with the natural pattern of rest, but instead replace this period, converting it into alertness and dedicating it to consumption and production activities. Evidently, the whole idea of keeping individuals vigilant and connected to the Internet through electronic devices such as smartphones, computers, tablets, among others, is an intentional proposal to discourage the natural sleep cycle as people normally wake up overnight to check messages, emails, work, shop etc. Besides, it creates the effect of a *hive mind* where everyone thinks, acts and behaves the same way once they're all connected in the same virtual arena.²

² Out of curiosity, in the context of the digital era, it is equally important to analyze the number of users on social media such as Facebook and Twitter. It is possible to observe that if Facebook were a country, it would be the largest country on the planet. China has a population of 1.42 billion according to a survey carried out in 2020 (Worldometers, 2020), while Facebook now has a population that exceeds 2.98 billion users, according to an estimate made in 2023 (Datareportal, 2023). Besides, on Twitter, for example, some people have more followers than entire countries. The fact is that the nine tech giants - Google, Amazon, Apple, IBM, Microsoft and Facebook in the United States and Baidu, Alibaba and Tencent in China, are the virtual empires that rule the world (Webb, 2019).

In accordance to Byung-Chul Han (2015a), the 21st society is a type of society characterized by an overindulgence of positivity. This notion of positivity essentiality denotes the influence on the individuals' minds embedded on the idea of motivation that goes beyond the limit of their capabilities. A society that replaces the verb *Should* – that has its origins in the disciplinary society, with a negative connotation - for the verb *Can* – that expresses a positive nuance. Thus, “the positivity of *Can* is much more efficient than the negativity of *Should*. Therefore, the social unconscious switches from *Should* to *Can*. The achievement-subject is faster and more productive than the obedience-subject.” (Han, 2015a, p. 9).

In this positive society, people have been systematically instigated to always pursue and achieve success. But the problem is, no matter how hard and individual tries to strive under this idea, he won't always be able to succeed and accomplish the feat. In fact, an exponential amount of people ends up getting frustrated with their lack of results and, as a consequence, what happens is a society reshaped by the emergence of a great variety of mental illnesses – or *burnout syndrome* in Han's own words (Han, 2015a) -, in some cases, even culminating into suicidal behaviors (Sturza; Tonel, 2020).

Nonetheless, besides the character of positivity, the 21st society has another element too, that is, *transparency*. This element has to do with the idea of a digital panoptic guaranteed by hyper communication worldwide. Thus, people live within a global digital panopticon covered under the camouflage of a false idea of freedom. In the author's words, people “[...] deliberately collaborate in the digital panopticon by denuding and exhibiting themselves. The prisoner in the digital panopticon is a perpetrator and a victim at the same time. Herein lies the dialectic of freedom. Freedom turns out to be a form of control.” (Han, 2015b, p. 49).

Historically speaking, Pinker (2019) – specifically in his book *The enlightenment now: the case for reason, science and humanism* - emphasizes that some of the ideas expressed in the neoliberalism such as the perception of self-responsibility and/or personal accountability, reason, freedom, progress, fraternity, the substitution of religious dogmas for the scientific knowledge, secularism, along with others, each one of them with the goal of improving the individuals' well-being and society as a whole, date back from the 18th Enlightenment period.

Notwithstanding, these same ideas ended up reshaping the individual himself as a self-entrepreneur and it started to guide his entire way of living based on financial rewards as well as comprehending personal achievement or success solely by the economic paradigm. In fact, this is one of the most emphasized narratives in the neoliberalism discourse (Clack, 2020).

However, the neoliberal rationality does not only permeate human subjectivity, the State, Law, politics, economic relations, society, and others, but it goes far beyond. The aforementioned rationality also operates and impacts relationships with the nature and the environment when reflecting the blatant issues caused by the widespread pollution, scarcity of natural resources, extinction of wild animals and plants, deforestation, wildfires, water contamination, conflicts, immigration, biopiracy, violence against indigenous peoples, global warming and climate change with catastrophic and devastating consequences for human beings, society and the planet – issues caused by the unrestrained action of exploratory economic activity. Furthermore, on the one hand, it is possible to highlight unprecedented global economic growth whereas, on the other hand, a considerable increase in social

inequality, lack of democratic decisions, violations of human rights and human dignity in large scale. Furthermore, it is possible to highlight that some of the neoliberal policies adopted such as privatizations, violations of labor and environmental laws in favor of certain multinationals, only have led to even deeper asymmetries between poor and rich countries.

Even with the due recognition of the contemporary environmental crisis based on international agreements and proposals in the search for solutions and mitigation measures for certain issues, the environmental problem is a political issue (Saavedra, 2019). However, what has been observed is the dominant market logic with the objective of profitability, the insertion of new technologies and, even, post-humanist or trans-humanist glimpses - in certain aspects - only continue to cast mirages of a more hopeful future with the aim of keeping the dominant paradigm active for those who notably benefit from it.

3 THE TRANSHUMANIST INSIGHTS FROM THE NEOLIBERAL PERSPECTIVE AND THE PLANET'S DESTRUCTION DICHOTOMY

Generally speaking, *Transhumanism* is a movement that shares the goal to fundamentally transform the natural human condition as well as improving and/or enhancing the human intellectual, physical and psychological dimensions with the assistance of technological development and eventually overcome the natural human limitations. Expressing it differently, “[...] the main idea of transhumanism lies in the adoption of technique and science to alter the human body, making it better. In other words, it is about the birth of a new human, with expanded potential.” (Santos, 2020, p. 247, our translation). A ramification of such a perspective is the idea of the *Human Cyborgization*, that is, a process is based on the blending of certain apparatuses into the human body with the aim of promoting – not only the complete employments of such tools – but, most importantly, the integration of such mechanisms into the human body system. This concept is constantly advancing and it is currently driven much more by culture than by biology itself (Greguric, 2021).

Virtually speaking, those are ideas and utopias that mainly comes from the transhumanist movement which is a growing philosophical movement that has been popularized among scientists, politicians, artists, businessmen and futurists. By this frame of reference, the intermingling of the biological human body with a substantial array of technological devices – such as, for example, elements found throughout the fields of nanotechnologies, biotechnology, neuroscience, robotics, machinery, cryogenics, artificial intelligence, and so forth and so on - that may bring positive and beneficial results when it gets contextualized with the idea of more effectively maintain as well as expanding the human life, extolling man’s right to shape his own existence, by maximizing the use of scientific technologies with the goal of enhancing the man’s physical, biological, intellectual potential and longevity (Manzocco, 2019). Some of the examples could be described as the possibility of overcoming diseases, preserving human memory, assisting people with physical disabilities to achieve their full range of movements and body’s sensory system, etc. Additionally, there is even the belief of overcoming death in itself and achieving immortality (Herbert, 2014).

Nevertheless, the ideas and utopias from the transhumanism concept raise fundamental ethical intricacies about humanity’s future and the relationship between man and technology. Hypothetically, if human beings might achieve immortality in an undefined future, then, it

might occur “[...] a profound revolution in the entire human universe. In this universe, everything that man transforms, transforms himself. All exterior modification becomes interior.” (Morin, 1970, p. 305, our translation).

For the purpose of this investigation, when narrowly focusing in the subject of death and immortality, it is important to underline a couple of philosophical approaches to better grasp a more accurate understanding. The American philosopher Shelly Kagan (2012, p. 239), in his book *Death*, dedicates a philosophical discussion concerning the subject of immortality in one of the book’s chapters. Throughout the author’s deliberation, he questions whether or not living consistently is a good or a bad thing. In this discussion, many consider life over death because the latest deprives individuals to keep enjoying the good things in life. Indeed, there are lots of great things to be enjoyed throughout the process of life. The author goes on and increments that imagination, considering that if people would be able to live indefinitely – and adding up the hypothesis that it would be a life strictly full of the good and enjoyable things, that means, subtracting all of the bad, negative and/or unpleasant things – therefore, a life permanently packed by the good and pleasurable things. In this imaginable scenario, an immortal individual would be able to enjoy and develop all his favorites aptitudes, hobbies, food, sports, studies and so forth and so on, that after a period of time, the same individual would run out of option and inevitably get into boredom – despite the possibility of that individual try to constantly reinvent himself or recreating life. Therefore, it is possible to summarize that death can work as a protective process against immortality.

Quintessentially, the author ends up his reflections concluding that it’s unappealing to never die. Therefore, immortality wouldn’t be the best choice to live life. However, “[...] neither is the best form of life what we have now, where you die after a measly fifty or eighty or one hundred years. Rather, the best thing, I suppose, would be to be able to live as long as you *wanted*.” (Kagan, 2012, p. 246, italicized by the author).

Despite the fact that the reader might think that all this philosophical discussion seems farfetched or something of that nature, yet, it is helpful when it comes to contextualizing what is currently being discussed in the 21st society and the uncertainties about the future. In accordance to Clack (2020), Neoliberalism approaches death as its greatest form of failure. Instead of accepting that there are things that goes beyond the human control and are perfectly natural, the neoliberal rationality tends to reject those natural vulnerabilities. In this context, “the consequence of this overweening faith in our own capacity lends itself to a view of death where it is just another variety of failure, best explained by reference to the capacities – or lack of them – of those who are dying.” (Clack, 2015, p. 119).

In light of the idea of overcoming death – or trying to expand human life – through a neoliberal perspective, without properly reflecting about the planet, the future generations and society, Clack (2015, p. 121) raises some questions, expressed in the following words:

[...] those who commit to spending their money on such hopes pay little attention to how the success of such strategies would affect future generations: what happens to the already-stretched resources of the planet if the yet-to-be-born are also faced with the demands of the should-be dead? That we are part of an ecosystem, that from the pers-

pective of the natural world we are not the isolated economic units of neoliberal theory, is refuted by the cryonicist as they push against the notion that death might reveal the limits to human striving. (Clack, 2015, p. 121).

However, it is possible to realize that the discussion about immortality hides a whole different connotation, normally, disguised as a good thing. For a society completely dominated and subjected by the neoliberal rationality, the idea of overcoming death doesn't necessarily follow the abstractions of sorting out all the good and pleasurable things of life as it has been previously reflected by the American philosopher Shelly Kagan. Instead, it uncovers the desire of making people live forever with the goal of continuing working and consuming as usual as it can be (Crary, 2013).

Logically, when confronting the idea of immortality against the environmental issues, it raises some questions. If, imaginably, human beings become immortal beings, what would happen to the new born babies – more specifically, the new generations? Given that the planet is finite in terms of natural resources and limited when it comes to geographical places, will there be enough space for everyone to live harmoniously? Not only that, in a world where technology can make people become the best version of themselves, pain free, being able to do everything they've always wanted in life, being able to upgrade their mind in order to have the highest IQ, no longer having to learn anything and spend years in schools and universities, but instead, being able to download everything and/or graduating at a young age – through the assistance of Artificial Intelligence -, people presenting some type of genetic abnormality that will be able to get fixed, and so forth and so on. Those are some hypothetical possibilities. However, if that's the case, then is it possible to imagine the social pressure accompanied with these things? Who's going to afford for such things? Will it be free for everybody or will it only be accessible to an exclusive elite?

In this sense, Clack (2020) tries to destabilize some of the current narratives that incite people to believe that the most natural thing to do is to strive and succeed at all costs and once the individual manages to achieve success – as a synonym of money, career, fame, social status, exhibitionism, living longer – then he is living the good life, when in fact, this has nothing to do with the concept of the natural world. The author goes a step further and proposes to rethink alternative ways out of the current narrative in a try to open up the achievement of better and more fulfilling lives, precisely because it resists and counterattacks the mainstream narrative that only perceives success in terms of economic value.

This understanding of human beings as mere isolated economic units doesn't seem to be seriously taken into consideration by the transhumanist movement and the neoliberal rationality. The contemporary environmental crisis, ironically, reveals what neoliberalism is least comfortable with, that is, the recognition of human vulnerability and its dependence on the world – the ecosystem itself – and on others. By this scope, “[...] the individual now focusing on life in a future world without these relational ties. Death is approached as a problem for the individual, the proffered solution being found in having the financial resources to combat it.” (Clack, 2015, p. 121). Henceforth, the main goal “[...] ends up following the trans-humanist project of constituting an individual into a post-human subject, whose functionality meets the needs of capitalist logic. The post-human of the trans-humanist project is not a freer

subject, but rather a more productive subject for the current capitalism system.” (Kawanishi; Lourenção, 2019, our translation).

In this conjuncture, the future individual thought by the transhumanist perspective allied with the neoliberal perspective can't be qualified as a free individual but rather as a profitable and productive immortal subject for the system. So far, it is an open question whether there will be intricacies to take advantage of those new human attributes, capabilities, aptitudes, skills or abilities generated by the entanglement with virtual technological machinery, massively hypertrophied to create a sustainable human versus the ecosystem balance, or these new skills will simply overwhelm the human brains, societies and narratives.

4 THE ELEMENTS OF THE ENVIRONMENTAL CRISIS: WHAT IS THE ENVIRONMENTAL CRISIS?

The world's contemporary scenario and future estimative are not very promising. The unwavering memory of passed catastrophic events and their predictable reoccurrences – which will possibly happen in stronger manifestations - has been the cause of apprehension as well as generating concerns throughout the variety of society's facets, demanding new intricacies in the attempt to create effective solutions or preventive methods and techniques to mitigate potential threats and hazards. Nevertheless, Tonel and Sturza (2020, p. 3) elaborate that “[...] the point to be stressed in this context is the fact that the answers – or the actions – proposed against chaotic events are oftentimes very aggressively ones”. In addition, the world spends “[...] billions waging the Cold War, billions fighting terror, and billions on vaccines and medical research.” (Wuthnow, 2010, p. 1).

In the past, it might have been possible to imagine the Earth as being something solid and stable, analogous to a safe environment that has sheltered humans for a long time and would naturally continue to provide into the distant future. Still, with the current diagnosis of climatic patterns alterations all around the world, precisely named by *climate change* or *global warming*, it's been possible to distinguish the present time from previous ways of living. Notwithstanding, throughout humankind's history, it's been observed that paradoxically, a relative short amount of time has been able to produce almost irreversible damages (Saavedra, 2014). Indeed, in a few decades or centuries, the planet might become a desert, such as those fictional portrayed in apocalyptic movies. Therefore, this propensity may suggest an accentuated spike where, perhaps, there may be no turning back or extent of repair that might suffice the planetary havoc (Giddens, 2011).

It's possible to identify that in a society pronounced by a rationality that exclusively preaches about individuality or individualism, where the possibility of overcoming the biological boundaries of existence such as sleep and death with the only goal directed towards production and business – it becomes drastically challenging to think about democratic participation, since serious collective engagement for discussions regarding those topics that reflect upon the survival of the planet are nowhere to be found.

With reference to this conundrum, Wuthnow (2010, p. 155) elaborates on the following passage:

Not only were the ecosystems of the poorest nations most at risk, but people living in those areas were most vulnerable to increased flooding from storms and rising sea levels, their health was at greatest risk, and their food supplies would be harmed. These concerns were well established in discussions about the environment. Yet the question of how exactly to make compelling moral claims was one that remained unsolved. Global warming presented an unusual challenge in this regard. In other instances, people might take action against peril from considerations of self-preservation, such as protecting themselves against nuclear radiation or a terrorist attack. But if global warming was not a serious immediate danger, what arguments might prevail? Was it enough to show that the poorest nations would suffer? Were calls for sacrifice realistic? Or would nothing be done until it was too late?

In recent years, the dominant glance comes from the understanding that humanity lives in a small, fragile, limited and finite world (Saavedra, 2014). This perception of the world equates to a geographic imaginary location represents how human beings and nature are relating to each other. Furthermore, in the political scale, taking into account this idea that the world is a large ecosystem that is not limited to the establishment of virtual or territorial borders based on purely human abstraction, it is possible to assert that the contemporary world society constitutes a *global polis*. Ultimately, the power relations of this *polis* are asymmetrical and unequal when comparing the distances between center and the periphery (Beck, 2016).

The current environmental issues and challenges such as the destruction of the Amazon Forest, climate change, water pollution, oil residues, wildfires, desertification, immigration, overpopulation, threats to the human health, human deaths, economic hazards, besides all types of chaotic events that can be imagined, are consequences of the absence and adoption of practical attitudes in the political realm. Furthermore, it is imperative to recognize the importance of a holistic outlook by the tenet that the contemporary environmental crisis is a systemic crisis, that means, the planet has to be considered in its integrity instead of localized approaches.

Due to the worlds current condition, some researchers, scientists and commentators claim that if the Third World's nations achieve the same level and standard of the First World's nations, in terms of progress and development, such as, for example, the United States of America, then the scenario might be a nefarious apocalypse with the potential of sweeping away the entire humanity as well as the planet since the latest wouldn't have natural resources to provide for such a high level of demand and consumption. However, it is necessary to be cautious when analyzing this type of reckoning. Clearly, this way of thinking comes from a central-peripheral domination rationale in which the elites intend to maintain their luxurious standard of living by increasing exploitation of natural resources at the expense of hindering the development and progress in the peripheral countries. In other words, while one third of the planet blatantly lives a lifestyle based on the over waste of finite and limited natural resources, the other side, lives in situations of conspicuous social inequalities and extreme impoverished conditions that aren't able to meet - neither fit - the minimal need for human survival (Saavedra, 2019).

In this context, it's been discussed quite a lot the concept of environmental accountability/responsibility. In other words, when talking about the contemporary environmental crisis, one

commonly comes across the statement that “we” – humanity as a whole – are responsible for the planet’s actual condition. In this regard, Welzer (2010) critically analyzes this premise – as well as the nomenclature “we” – and concludes that this perspective is equivocal since “[...] the use of the pronoun “we” presumes a collective perception of reality, which simply does not exist, particularly within the context of global problems such as global warming.” (Welzer, 2010, p. 49, our translation). Moreover,

the political indolence of this abstract “we” ignores the sovereign influence of power and its effects, much less controls the resulting ideological positions. Scientifically, a description of the world in the first-person plural is not only impossible, as the cultural history of nature undoubtedly demonstrates, but also highlights the radical differences in survival needs in different regions of the Earth. (Welzer, 2010, p. 50, our translation).

Therefore, it’s been thought that humanity is an abstract concept constituted of billions of individuals in different social, political, cultural, geographic, environmental and economic contexts, which, consequently, incurs blatant ambivalence in the use of the expression – and its accountability – in the general context of all humanity. However, what has been expected is a common future free from the threats discussed here for all of humanity, that is, “us”. Nevertheless, in Welzer’s (2010) understanding, those prognoses shouldn’t be thought as natural catastrophes, because their causes are anthropogenic, that is, they are caused by human action on the environment.

Notably, at a first glance, the response to these dangerous times seems to be inert or even stationary. Despite the overwhelming anxieties that the planetary devastation might reveal, daily life seems to go by as usual as it can be. Everybody knows for a fact that death is something that will surely happen either sooner or later, but when it comes to the scrutiny over the possibility of massive human extinction on colossal scale, is something that has to be considered *per se*.

In such dilemma, Beck (2016) states that the old and conventional sociology and economics of social inequality completely ignores the contemporary world issues such as climate change, nuclear risks etc, due to a limited national perspective that isn’t able to fully grasp such challenges and actually doesn’t capture the entire essence of the context in regards to social inequality nowadays. At this point, the referred author introduces the concept of metamorphosis which comes up on the scene as a critique to the dominant conventional model of the nation-state, precisely lacking the cosmopolitan element. Additionally, the author understands that, even though people may be aware about what’s going on in the world today, that is of little value if this awareness doesn’t end up resulting into some action. If that’s the case, then the lack of action may result in people’s renouncing their democratic rights.

By the same token, climate change, for instance, is not limited to the traditional notions of artificial borders created and defined by the human imagination (Norman, 2023). Once again, Beck (2016) claims that this basically represents a transition from those who would initially be considered at risk to other groups that wouldn’t be considered at risk – for example the rich individuals - because climate change goes far beyond the understanding of vulnerabilities that only effect those ethnic, physical and economic groups considered less favored but, on the contrary, climate risks can affect the rich too – or simply, people who wouldn’t be

categorized by any typical vulnerability. The same works and applies to the issue of nuclear threats, when it really has the potential to threaten both sides (the North and the South – the rich and the poor).

So, the challenge is to find alternatives out of this conundrum. In this context, Dardot and Laval (2013) recommend to elect another governmentality, that is, the idea of creating a political response that matches the dominant normative regime – something that has never being seen before. Given that the neoliberal governmentality is not democratic at all, therefore, it is imperative to develop and *counter governmentality* as an alternative to impose resistance and try to hinder the current dominant regime. The authors suggest that such an abstraction has to must be based under the tenets of mutual assistance, cooperative work, solidarity, etc.

Generally speaking,

the contemporary scenario translates into disagreements for Law, which is no longer able to establish exclusively public spaces in the face of the invasion of the economy over all areas of human activity, or even Law, which, through its own mechanization, has put reality out of the loop social, life and history, failing to face the complexity of the world and, in this way, progressively loses the ability to order, shape, shape, control and regulate society and the economy, as its own origins justified. (Cenci, 2011, p. 120, our translation).

Among the environmental preoccupations, “[...] if overpopulation, resource depletion, and pollution don’t finish us off, then climate change will.” (Pinker, 2019, p. 121). The referred author believes that any environmental issue – when confronted like any other problem out of human existence - is solvable. Yet, the key comes from the adoption of adequate knowledge, that is, an optimistic Enlightenment vision, based on the idea that progress has improved the conditions of humanity’s existence³, in such a way that, “[...] it has fed billions, doubled life spans, slashed extreme poverty, and, by replacing muscle with machinery, made it easier to end slavery, emancipate women, and educate children.” (Pinker, 2019, p. 123-124).

Still, Pinker (2019), disagrees with the commonly raised argument that the planet Earth is being corrupted and destroyed by human rapacity and that its resources are finite and running out. For the author, the scarcity of resources is a fallacy. In other words, “[...] as the most easily extracted supply of resource becomes scarcer, its price rises, encouraging people to conserve it, get at less accessible deposits, or find cheaper and more plentiful substitutes” (Pinker, 2019, p. 127). Additionally, the resource scarcity claim, remains incompatible with the concept of sustainability, because the latter translates into the idea that the current rate of use of a resource can be extrapolated into the future until it reaches a certain limit, replacing it or by a renewable resource that can be replenished as it is used, indefinitely. Furthermore, civilizations have always abandoned a resource that was in the process of being exhausted and replaced it with another resource⁴ (Pinker, 2019).

³ This concept can also be called *Ecomodernism*, *Ecopragmatism*, *Earth Optimism* and the *Blue-Green* or *Turquoise movement*. Or, in Pinker’s own words – *Enlightenment Environmentalism* or *Humanist Environmentalism*.

⁴ However, it is important to remember that not all of the natural resources can be replaced by others with similar characteristics and uses. Within this context, it is possible to pinpoint to the example of water, taking into account that this substance is an irreplaceable resource and share high value.

Within the core of this discussion concerning the scarcity of resources in the current world, authors such as Defries (2014) focus on ideas such as crop rotation, chemical fertilizers, hybrid crops, pesticides, genetically modified organisms, hydroponics, aeroponics, vertical urban farms, robotic harvesting carried out by drones, meat produced in vitro, artificial intelligence algorithms, sea water desalination, etc.

For this reason, Pinker (2019) places his faith in the migratory movement from the countryside to the cities – a type of rural exodus – something that in his point of view is considered to be a sustainable alternative. This may be translated as the departure of people from geographical spaces located in the countryside or agricultural lands and their respective insertion into urban spaces, precisely because that would generate conditions of greater sustainability for the environment as it allows greater expansion for the use of land when it comes to agricultural practices. Furthermore, within an ecomodernist perception, organic agriculture itself is considered unsustainable and it requires a huge amount of land to produce food.

In the meantime, it is partially possible to agree and consider some of previous ideas and arguments. However, when faced with the quality of life and human health, issues such as the use of agrochemicals, pesticides, GMOs and artificial food crops (Sturza; Cenci; Tonel, 2022), sea water desalination⁵ and agricultural robotization itself can become a cause of concerns and threats to human health, unemployment, housing, violation to indigenous rights, traditional knowledge, etc. In fact, these premises may even strengthen the multinationals and agribusiness movement.

Out of curiosity, it is interesting to highlight, by way of illustration, that Bill Gates – one of the richest individual in the world – has become the largest private owner of agricultural land in the United States of America, possessing around 242,000 acres of agricultural land - approximately, 97 thousand hectares (The Guardian, 2021). This paradox, where an individual concentrates pharaonic amounts of land, reveals that, “Land is power, land is wealth, and, more importantly, land is about race and class. The relationship to land [...] reflects obscene levels of inequality and legacies of colonialism and white supremacy in the United States, and also the world.” (The Guardian, 2021).

Furthermore, the accumulation of wealth always proves to be the synonymous of exploitation and expropriation. Similarly, in Brazil, for example, it is possible to bring in context an analogous case, where the *Bom Futuro Group*, is in first place in the ranking of the largest land owners, with around 583 thousand hectares of land (Canal Rural, 2021).

Likewise, Cahill and McMahon (2010) distinguish that

poverty and wealth are not, as is often thought, opposites. Instead, the two words predicate a problem, poverty, and also indicate its solution – wealth. Land is the single most common characteristic of wealth worldwide. What the poor lack – land – the rich have in spades. In fact, land defines the wealthy to a far greater extent than cash.

⁵ Water desalination, in addition to not being a cheap alternative, it can also have effects on human health, leading to negative environmental impacts – in some cases presenting significant levels of toxicity, thus requiring further research and development (Un Environment Programme, 2019).

Correspondingly, Riechmann (2002, p. 105, our translation) emphasizes that “[...] severe hunger and malnutrition are not technical problems, but of a political-social nature. [...] hunger is nothing more than a symptom of deeper social ills: poverty and inequality.” Besides, “[...] the cause of hunger is not the lack of food in the world. Hunger exists because there is a problem of distribution and poverty, problems that cannot be solved by transgenic.” (Antoniou, 2014, p. 284, our translation).

With all that being exposed, the indigenous author Krenak (2020), in his book *Ideias para Adiar o Fim do Mundo* – Ideas to Reschedule the End of the World –, claims the necessity of creating ways of resistance against the end of the world, that is to say, it is the refusal of the Kantian premise that comprehends humanity merely as a number of humans, but it seeks to expand this idea based on the understanding of humanity as a whole, strictly speaking, embracing nature in which human beings are part of. By way of explanation, it is necessary to abstain from the deadly “humanism” of the West – techno-capitalist civilization. Also, it is essential to find new meaning to human existence based on the assumption that human beings are interconnected with their nature. The author goes on and says that it is perfectly possible to stop the dominant lifestyle. However, it is important to highlight that there are groups that continue to resist the dominant standard of living, nonetheless, these are considered quasi-human, which are people who “[...] insist on staying out of this civilized dance, of technique, of control of the planet. And for dancing a strange choreography they are taken out of the scene, by epidemics, poverty, hunger, targeted violence” (Krenak, 2020, p. 70, our translation).

Besides, when the ideas of transhumanism, human immortality and neoliberalism get confronted in the context of a global ecological and social crisis such as the current one, it raises a couple of questions and implications. First of all, in the current situation of the environmental crisis, “[...] the pursuit of a high-tech industrial society will end up finishing off the Earth; and second, because the breakdown of the biological unity of the human species will lead to a world of inequalities and biologically determined domination” (Ayerra, 2019).

Suppositionally, the issue with inequality when it comes to the accessibility to “immortality” or any of the transhumanist enhancements, in other words, who will have the financial conditions to pay in order to become “immortal” or access any of the benefits generated by the transhumanist approach? Notably, it is reasonable to presume that the transhumanist propositions might keep distancing the rich from the poor. Second of all, the other aspect to be reflected upon is the issue of natural resources. How to deal with energy consumption in an undetermined future?

5 FINAL CONSIDERATIONS

Neoliberalism abruptly intensifies environmental problems due to the acceleration of production and consumption rationale, ultimately, causing all sorts of environmental impacts as well as scarcity of irreplaceable natural resources. In this context, finding solutions or mitigation measures within this rationality is extremely challenging, since the political, legal, social and individualistic behavioral elements are, undoubtedly, controlled by that rationale.

Nevertheless, as it has been previously discussed, in the same way that death is a cause of discomfort for the neoliberal rationality, analogically, environmental degradation identifies

the limits of the dominant logic insofar as it points directly to human vulnerabilities. In short, it has been possible to demonstrate that some fragments of the argument for the indirect adoption of transhumanism as a way of solving environmental problems is a complete hoax. Putting it in another way, it only works as a camouflage with the purpose of keeping up with an unsustainable lifestyle for the wealthier groups at the expense and sacrifice of the poor. Besides, it's been evidenced that the neoliberal (ir)rationality takes advantage and sees opportunities for production and consumption logic even by the environmental crisis itself.

By this scope, a couple of questions rise up: Given the discussed context, how is it possible to think about future generations? When one talks about future generations, does it refer to everyone without distinction, or does it only operate in relation to the future generations of a wealthy distinct elite? How is it possible to think about the concept of sustainability and the very survival and maintenance of human life on the planet, based on a generation characterized by individualism, lack of empathy and technological narcissism? How is it feasible to discuss human dignity in the face of the transhumanist tendency to influence – and even coerce – the individual to abandon their natural state of life and embrace the hybrid, the artificial, the virtual, where the very definition of what has always been understood as a 'human being' becomes blurry?

6 REFERENCES

- ANTONIOU, Michael. et al. *Transgênicos: mitos y verdades*. Chile: Earthopensource/Quimantú, 2014.
- AYERRA, Carmen Madorrán. An eco-social perspective on transhumanism. *Green European Journal*. 16 Aug. 2019. Retrieved from: <https://www.greeneuropeanjournal.eu/an-eco-social-perspective-on-transhumanism/> Access in: Oct. 31 2023.
- BECK, Ulrich. *The metamorphosis of the world: how climate change is transforming our concept of the world*. Polity, 2016. Kindle edition.
- CAHILL, Kevin; MCMAHON, Rob. *Who owns the world: the surprising truth about every piece of land on the planet*. New York: Grand Central Publishing, 2010. Available to Kindle edition.
- CANAL RURAL. *Mais lidas em 2021: "rei dos hectares": veja quem são os nossos 3 maiores produtores agrícolas*. 2021. Retrieved from <https://www.canalrural.com.br/noticias/agricultura/mais-lidas-em-2021-rei-dos-hectares-veja-quem-sao-os-nossos-3-maiores-produtores-agricolas/>. Access in: June 22 2023.
- CENCI, Daniel Rubens. Nova ordem mundial e a vulnerabilidade da proteção jurídica ao meio ambiente. In: SEITZ, Ana Mirka et al. (Org.). *América Latina e Caribe na encruzilhada ambiental*. Ijuí: Editora Unijuí, 2011.
- CLACK, Beverley. *How to be a failure and still live well: a philosophy*. New York: Bloomsbury Academic, 2020.
- CLACK, Beverley. Constructing Death as a Form of Failure: Addressing Mortality in a Neoliberal Age. In: CHOLBI, Michael. *Immortality and the philosophy of death*. New York: Rowman & Littlefield International, 2015. p. 115-134.
- CRARY, Jonathan. *24/7: late capitalism and the ends of sleep*. New York; London: Verso, 2013.
- DARDOT, Pierre; LAVAL, Christian. *The new way of the world: on neoliberal society*. Translated by Gregory Elliott. New York: Verso, 2013.
- DATAREPORTAL. *Essential Facebook statistics and trends for 2023*. 2023. Retrieved from: [https://datareportal.com/essential-facebook-stats#:~:text=Number%20of%20Facebook%20users%20in,\)%3A%202.989%20billion%20\(April%202023\)&text=Number%20of%20people%20who%20use,\)%3A%202.037%20billion%20\(April%202023\)](https://datareportal.com/essential-facebook-stats#:~:text=Number%20of%20Facebook%20users%20in,)%3A%202.989%20billion%20(April%202023)&text=Number%20of%20people%20who%20use,)%3A%202.037%20billion%20(April%202023)). Access in: July 31 2023.
- DEFRIES, Ruth. *The big ratchet: how humanity thrives in the face of natural crisis*. New York: Basic Books, 2014.
- GIDDENS, Anthony. *The politics of climate change*. USA: Polity Press, 2011.
- GREGURIC, Ivana. *Philosophical issues of human cyborgization and the necessity of prolegomena on cyborg ethics*. Croatia: Information Science Reference, 2021.
- HAN, Byung-Chul. *The burnout society*. Stanford, California: Stanford University Press, 2015a.

- HAN, Byung-Chul. *The transparency society*. Translated by Erik Butler. Stanford, California: Stanford University Press, 2015b.
- HARDT, Michael; NEGRI, Antonio. *Common wealth*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2009.
- HERBERT, David. *Becoming God: transhumanism and the quest for cybernetic immortality*. Canada: Sola Scriptura Ministries International, 2014.
- KAWANISHI, Paulo Noboru de Paula; LOURENÇÃO, Gil Vicente Nagai. Humanos que queremos ser. Humanismo, ciborguismo e pós-humanismo como tecnologias de si. *Dossiê Trabalhos em Linguística Aplicada*, 58. May./Aug. 2019. Retrieved from: <https://www.scielo.br/j/tla/a/fzkbckZ8nZzfzqfJfKDCBhf/?lang=pt>. Access in: July 26 2023.
- KAGAN, Shelly. *Death*. New Haven and London: Yale University Press, 2012.
- KRENAK, Ailton. *Ideias para adiar o fim do mundo*. São Paulo: Companhia das Letras, 2020.
- MANZOCCO, Roberto. *Transhumanism – engineering the human condition: history, philosophy and current status*. New York: Springer, 2019.
- MASI, Domenico de. *O ócio criativo*. Rio de Janeiro: Sextante, 2000.
- MASI, Domenico de. *O futuro do trabalho*. Milão: Unb, 1999.
- MASI, Domenico de. *O trabalho no século XXI: fadiga, ócio e criatividade na sociedade pós-industrial*. Rio de Janeiro: Editora Sextante, 2022.
- MORIN, Edgar. *O homem e a morte*. Trad. João Guerreiro Boto e Adelino dos Santos Rodrigues. Portugal: Publicações Europa-América, 1970.
- NORMAN, Donald A. *Design for a better world: meaningful, sustainable, humanity centered*. Cambridge, Massachusetts: The MIT Press, 2023.
- PINKER, Steven. *The enlightenment now: the case for reason, science and humanism*. United Kingdom: Penguin Random Science, 2019.
- RIECHMANN, J. *Cultivos e alimentos transgênicos: um guia prático*. Petrópolis, RJ: Vozes, 2002.
- SAAVEDRA, Fernando Estenssoro. *A geopolítica ambiental global do século 21: os desafios para a América Latina*. Ijuí: Editora Unijuí, 2019.
- SAAVEDRA, Fernando Estenssoro. *História do debate ambiental na política mundial 1945-1992*. Trad. Daniel Rubens Cenci. Ijuí: Editora Unijuí, 2014.
- SAFATLE, Vladimir; JUNIOR, Nelson da Silva; DUNKER, Christian (org.) *Neoliberalismo como gestão do sofrimento psíquico*. Belo Horizonte: Autêntica, 2021.
- SANTOS, Agripino. *Tecnonatureza, transumanismo e pós-humanidade: o direito na hiperaceleração biotecnológica*. Salvador: Editora Podivm, 2020.
- STURZA, Janaína Machado; CENCI, D. R.; TONEL, R. Saúde e narcóticos ecológicos: agrotóxicos como ameaça à segurança alimentar e ao meio ambiente. *Veredas do Direito*, Belo Horizonte, v. 19, n. 44, p. 321-341, maio/ago. 2022. Retrieved from: <http://www.domhelder.edu.br/revista/index.php/veredas/article/view/1600>. Access in: June 22, 2023.
- STURZA, Janaína Machado; TONEL, Rodrigo. The fundamental human right to health: the conjuncture life and death through a sociojuridical reflection on the phenomenon of suicide. *Revista Thesis Juris*. v. 8, n. 2, p. 227-243, 2020. DOI: 10.5585/rtj.v8i2.13706. Retrieved from: <https://periodicos.uninove.br/thesisjuris/article/view/13706> Access in: October 30 2023.
- THE GUARDIAN. *Bill gates is the biggest private owner of farmland in the united states. why?* 2021. Retrieved from: <https://www.theguardian.com/commentisfree/2021/apr/05/bill-gates-climate-crisis-farmland>. Access in: July 22 2023.
- TONEL, R.; STURZA, J. M. Far beyond from the obstacles and adversities in times of pandemic: the effects of Covid-19 on humanity's mental health. In: MARTINI, Sandra Regina; WINGERT, Márcia Ribeiro; MAGLIACANE, Alessia J. (org.). *Pandemic in Mercosur: perspectives for a debate*. 1. ed. Paris: Classi Edizioni, 2020. p. 44-60. V. 1.
- UN ENVIRONMENT PROGRAMME. *Towards sustainable desalination*. 2 May 2019. Retrieved from: <https://www.unep.org/news-and-stories/story/towards-sustainable-desalination>. Access in: July 25 2023.
- WEBB, Amy. *The big nine: how the tech titans and their thinking machines could warp humanity*. New York: PublicAffairs, 2019.
- WELZER, Harald. *Guerras climáticas: por que mataremos e seremos mortos no século 21*. Trad. William Lagos. São Paulo: Geração Editorial, 2010.

WORLDOMETERS. *China population*. 2020. Retrieved from: <https://www.worldometers.info/world-population/china-population/>. Access in: July 31 2023.

WUTHNOW, Robert. *Be very afraid: the cultural response to terror, pandemics, environmental devastation, nuclear annihilation, and other threats*. New York: Oxford University Press, 2010.

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