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Anthropocene, Capitalocene or Westernocene? On the Ideological Foundations of the Current Climate Crisis

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ABSTRACT

In the current debate on the causes, consequences and solutions for the climate crisis, it will be argued that the hegemonic discourse of the Anthropocene implies a problematic anthropological, ecological, historical and scientific perspective, as, by reproducing a Cartesian dualist view, it replicates the ideological schemes that are at the origin of the crisis. Therefore, after exposing the main assumptions of the Anthropocene, a critique is proposed by conversing with alternative perspectives. As it will be pointed out, these tend to focus on single elements only gaining importance because of the role they play within the world-ecological capitalist structure, which requires assuming a broader historical and structural proposal: the Capitalocene perspective. In this study, while interrogating the constitutive pillars of the Capitalocene, the aim is to analyze at an even deeper level to highlight that capitalism itself is a material structure built on the ideological foundations of Western thought, whose approach to the predation of nature precedes Cartesian dualism. The objective of this paper will then be to discuss these issues and conclude that it will not be the anthropos that leads us to a new geological period, but capitalism through its Western intellectual foundation: the Capitalocene as a Westernocene.

KEYWORDS Capitalocene; Anthropocene; world-ecology; climate change; capitalism

Introduction

This article is framed around the contemporary discussion on the origins of climate change, derived from dysfunctional relationships between humans and the environment. In the last decade, the violence with which frequent environmental disasters and extreme climatic events have impacted human and animal communities have been accompanied by a general acceptance of an irreversible planetary climate change (Crutzen 2006). However,

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once this truth has been assumed, the debate opens up about which of all the narratives studying humans, nature and their relationships best tell the drama of the climate emergency in the most appropriate way. In this debate, one narrative has emerged as hegemonic: the Anthropocene, to which we will devote the first part of this article. The virtue that this narrative possesses, as we will see, is to be the first to make a theoretical effort to apply an encompassing and relational look at environmental problems and human groups (Bonneuil and Fressoz 2016). However, we will argue that it is an approach supported by the fallacy of generalization, as it relies on a speciesist abstraction that conceives humanity as a unitary actor, and thus overshadowing its diversity and ultimately attributing the responsibility for climate change to a fictitious homogeneous actor. Against the injustices derived from anthropocenic interpretations alternative discourses have emerged, among which we will highlight that of the Capitalocene as a solid alternative. Avoiding the fallacy of generalization, the Capitalocene will be the sole narrative that manages to demonstrate that, beyond the abstraction of humanity, the concreteness of the capitalist system in its modes of appropriation and technological exploitation of nature will be what triggers the unstoppable process of climate modification (Moore 2016a). In this way, capitalism, from the theoretical coordinates of the Capitalocene, would be the architect of both the ideological composition, by means of enlightened science, and the material composition, by technological means, of nature subjected to the rule of the accumulation principle. This counternarrative to the Anthropocene will be explored in the second section. However, as we shall see in the last part of the article, the Capitalocene perspective itself could be rectified and expanded if we assume into the narrative the dependence of capitalism on the ideas of nature and techno-scientific development that preceded its foundation, and which turned out to be the origin of Western civilization itself. Indeed, if, as the Capitalocene will underline, the material inflection of climate change can be placed in 1492 with the beginning of the capitalist appropriation of global nature, its mental inflection would start in the 5th century B.C., with the de-vivification of nature undertaken in the cradle of Western civilization, in ancient Greece. These reflections will allow us, therefore, to contribute to the debate by adding our proposal to consider the Capitalocene as a Westernocene.

The Anthropocenic Framework and Its Discussion

The term “Anthropocene” was informally coined by Eugene F. Stoermer in the 1980s, however, it would not be until the beginning of the 21st century that Nobel laureate Paul Crutzen popularized it in reference to the current geological period of the planet. The Anthropocene perspective will point out that the great environmental distortions caused by human activity

allow us to deduce that the Earth has entered a new period. This is a period which is said to be characterized by a humanity that has now developed into a telluric force, and which is now capable of modifying the planet's climate on its own. In other words, we would not be in the Holocene, as Geological Sciences say, but in the Anthropocene, a new geological period driven by human activity: the *anthropos*.

Following this last argument, Crutzen (2006) will initiate a series of detailed studies aimed at explaining, through data, the incredible impact that humans have had on the environment. This will open a school of thought, which we will refer to here as “anthropocenic,” focusing on investigating the causes and consequences of this new climatic moment on the planet.

Despite being both a contested concept and perspective, we agree with Bonneuil and Fressoz (2016) in affirming that the greatest merit of the anthropocenic discussion lies in having established a new narrative on the history of the Earth, allowing for an opening toward actions that could reverse its destruction.

Another advantage of the Anthropocene is that, according to Crutzen (2006), it is an open discussion that, in agreement with Moore (2016b), we can divide into two broad camps: the “Geological Anthropocene” and the “Popular Anthropocene.”

The “Geological Anthropocene,” on the one hand, is a natural sciences perspective referring to the school initiated by Stoermer and Crutzen and aimed at tracing the measurable impacts of human communities on the planet. It is thus characterized by analyzing dimensions such as the level of atmospheric CO₂, the degree of polar melting or the radioactivity present in territories such as Chernobyl or Fukushima.

The “Popular Anthropocene,” on the other hand, is a human and social sciences perspective that alludes to “a way of thinking about the origins and evolution of modern ecological crisis” (Moore 2016b). This field does not discuss the physical, tangible effects that human activity has on the planet, but rather asks about climate change causes.

In contrast to the “Geological Anthropocene,” whose proposal has been widely accepted (beyond its consideration as a new geological period), the “Popular Anthropocene” has given rise to a prolific academic discussion both in the Structuralist field of International Relations and in the field of Political Ecology.

On this point we can talk about two well-differentiated positions. One block is made up of those who support the anthropocenic framework, sustaining the concept, but discussing its conformation, while the other could be described as the “critical block,” oriented to dismantle the postulates of the Anthropocene in order to construct alternative theories which, according to their promoters, better reflect the global ecological reality.

The first block mentioned above, presents, as indicated by Bonneuil and Fressoz (2016), a number of common features. The first of these has to do with the historical narrative of the origins, fundamental events and phases experienced by the Anthropocene. Secondly, it is important to highlight that any Anthropocene perspective is ecocentric, considering the Earth as a complex system. Finally, Anthropocene studies consider humanity as both a biological entity and a geological agent.

These three fields settle the dialectical battle over the extent, dimension and characteristics of the Anthropocene period.

On the first point, concerning the historical narrative, the main divergence tends to reside around when to situate the beginnings of the Anthropocene. The hegemonic explanation, provided by Crutzen (2006), fixes the beginning of this geological period in 1782 for two reasons: it is the symbolic date on which the steam engine was created, and it is situated in the 18th century, a time when glaciers show a significant increase in gas emissions such as CO₂, CH₄ and N₂O. Various authors, on the other hand, consider that the beginnings of the Anthropocene came earlier. Thus, for example, for Morton (2014) this period would begin with the onset of agriculture since this will be the first great anthropocentric transformation of the environment, which will lead to the imposition of the human order on nature that has been (and is) the cause, to date, of climate change. For authors such as Lewis and Maslin (2015), as well as for Moore (2016a), the starting date of the anthropocenic period would be 1492, with the European conquest of America, since this will be the time of the true globalization of food (potatoes, tomatoes, etc.) and livestock.

As for the second point of the Anthropocene discussion, concerning the consideration of the Earth as a complex entity, two opposite positions tend to differ on the very characteristics of the planet and the role of humankind in it. Thus, while some authors tend to perceive the Earth as an organism or as a machine – that is, as a whole, as a single matrix-, others apply General Systems Theory seeing the planet as an object that can be split into parts and then analyzed individually or in interaction. For the organicist or mechanist positions, humanity can thus be either an external distorting agent (for example, an element that would be “forcing” the earth’s machinery) or a damaged part of that organism, assuming that it is also part of the same matrix. In contrast, systemic perspectives, depending on the hierarchy they grant to humanity within their schemes, tend to place it either as just another element within the natural order of the planet or as “the” fundamental element determining its whole functioning. Bonneuil and Fressoz (2016, 54) describe this as “human exceptionalism.”

As for the debates on the third point, about the consideration of humanity as a biological entity and geological agent, they tend to revolve around who is responsible for the Anthropocene. Is it humanity as a whole? Crutzen’s

perspective assumes an abstract universalism that considers humanity as a single entity, an actor whose actions have led to the current environmental crisis. However, other authors advocate for global environmental justice (Eckersley 2007) placing greater responsibility on industrialized societies than on those of the global periphery, and on current generations as they are responsible for the material reality that will be experienced by future generations.

As can be deduced, the Anthropocene encompasses a discussion of a wide range of positions, indicating the complexity of its proposed framework. However, as we pointed out above, this is only one of the two blocks of discussion existing in the field of the “Popular Anthropocene.” The other block, which we have called “critical,” will be analyzed in the following section.

The Capitalocene as a Critique of Hegemonic Approaches to the Climate Crisis

As we have mentioned, in spite of the richness of the existing discussion of the Anthropocene, a number of academics have considered its main postulates as erroneous and, therefore, have found it impossible to place themselves in the critical framework of this perspective. Moreover, it is understood that it reproduces some of the framework causing planetary environmental deterioration.

Thus, under the label of “critical block” we include all those positions marked by their “opposition” to the Anthropocene (which we could also call “anti-anthropocenic”). The literature in this field is very extensive, but it should be noted that few positions have been sufficiently developed to form a robust theoretical corpus that can counterbalance the hegemonic framework. This is why we consider that the only solid theory capable of opening a line of studies broad enough to generate a relevant academic debate is the “Capitalocene,” promoted by Jason W. Moore (2016a).

The initial opposition of the Capitalocene to the Anthropocene framework will start from two basic criticisms: its reproduction of Cartesian dualism and its consideration of humanity as an abstraction representing a homogeneous actor responsible for the climate crisis. Against this, the Capitalocene, “an ugly word for an ugly system” (Moore 2016a, 5), will be built on a perspective based, on the one hand, on considering that humanity and nature conform the same matrix and, on the other, on the understanding that the real geological agent causing climate change is the historical-global capitalist system. The synthesis of these elements would lead to the deduction that the current geological period will not be the Anthropocene since it is not the anthropos that has changed the climate, but the Capitalocene, since capitalism is the driving force of this ecological transformation.

Regarding the first critique, we can indicate that it is oriented to deconstruct what has been called by Ecofeminism as “philosophical dualism” (Bretherton 1996) or by Structuralism as “Cartesian Dualism” (Moore 2015a, 171), two labels that allude to the same thing: the assumed Enlightenment separation between humans and nature as if they were two distinct substances.

According to these postulates, since the Enlightenment scientific thought has been built around an implicit consensus: on the one hand, there would be the world of human beings, which represents the *logos*; that is, the rational, reflective, civilizational and progressist; and, on the other hand, there would be nature, which represents the physical, inanimate and immoral space, where the savage nature reigns. This separation between the sphere of human civilization and the savage nature would imply that human beings, endowed with reason, are superior, since they have the capacity to think about their environment and transform it by means of that reason, and in order to achieve progress. Nature would be, therefore, a passive place, a set of objects and things available for appropriation by humanity, which, in this way, would successfully lead to a path of development.

This also reproduces a teleological perspective: the history of humanity is linear, and through the growing knowledge of natural space and its appropriation, human beings would come closer to their final cause, which varies according to the optic adopted, whether religious (approaching God) or political (for example, communism understood as full equality that would allow the abolition of the State).

The Capitalocene starts from the premise that the division humanity/nature is artificial, as it does not correspond to a reality in which, effectively, all life on Earth is interrelated; or is it possible to live without oxygen, food or water?

But the main criticism directed at Cartesian dualism from the Capitalocene is that, by constructing nature as inferior and controllable, it has legitimized the capitalist process of appropriation by converting it into resources. Ecofeminist and Decolonial schools of thought have also pointed out that, in this dualism, both women and colonies have been placed on the side of nature, which has legitimized, in pursuit of progress, their exploitation in the history of capitalism.

We thus return to the basic theoretical position of this perspective: eco-centrism. If we break with this dualism and analyze humanity-in-nature, then we simultaneously break with the “green arithmetic” which is the hegemonic perspective of mainstream ecologism. This approach consists of analyzing reality as formed by humans and nature, summed but synthetized, whereby the anthropocenic dualism is then reproduced once again. Eco-centrism, thus, allows us to understand that the planet Earth forms a single ecosystem where all life is interdependent and, therefore, requires

the same protection. Nature under this view is moral *per se* and does not exist only for its usefulness to humans. For this reason, instead of speaking of nature and humanity, Moore (2015a) speaks of human and extra-human natures in plural.

The theoretical (and potentially practical) consequences of Cartesian dualism derive from a construction of nature as something appropriable, “cheap” in terms of value composition (Moore 2014a), and a strategy functional to the processes of capitalist accumulation. This perspective is thus located at the genesis of the capitalist system, serving for the appropriation of surplus value from both human labor and the exploitation of extra-human nature, indispensable for accumulative expansion. The difference between the two lies in the fact that, while a minimum value has been established (except in the case of slaves) allowing for the social reproduction of individuals for the former, the latter has been appropriated without taking into account the natural rate of replenishment of natural elements. This is what Wallerstein called “the dirty secret of capitalism” (1999) referring to the inherent tendency of the productive scheme not to take charge of the effects that its appropriation of resources has on the planet. For Moore (2015b) this implies that the system, by transforming nature in a capitalist sense, puts the focus on immediate benefits without attending to the fact that it is actually generating “negative value” in the long run. This is the case since it not only destroys but also produces an environment hostile to capital accumulation through the generation of harmful effects such as climate change. This self-destructive tendency is what O’Connor (1998) called the “second contradiction of capitalism” since, in addition to the first contradiction exposed by Marx, referring to the fact that the exploitation of the proletariat would push it to organize and carry out the revolution that would overthrow the system, we should add the fact that the exploitation of nature will end up annihilating the very possibilities of survival of the capitalist system.

This brings us to the second criticism against the Anthropocene and its consideration of humanity as a unitary actor. The Capitalocene is such because the environment has been destroyed mainly by the core States, even though it affects more severely those located in the periphery of the world-ecology, and because, within the core, only a minority has promoted and benefited from such a project. The Capitalocene, therefore, maintains that there is no such thing as “humanity,” but that the environment and human beings have been exploited equally in favor of the capitalist system, of which 1% of the world’s population is the beneficiary. Thus, the Anthropocene, by speaking of humanity as a single abstract actor, reproduces this dualism without understanding that the vast majority of human beings have been, and are being, along with extra-human nature, irreversibly affected by capitalism.

Regarding the roots of the Capitalocene, as we mentioned above, its theorists maintain that it began in 1492 during the long 16th century, when the social relations of production that would drive the emergence of the fossil economy were established. Thus, it would not be a matter of when global CO2 emissions began to alter the atmosphere, but of when the capitalist socio-productive conditions would allow this to happen.

This set of premises articulates a perspective that will serve to understand the structural factors and systemic dynamics behind the change of geological period, based on the broad theoretical corpus of the Braudel-Structuralist school in International Relations and its knowledge of capitalism as a global-historical superstructure. More precisely, the Capitalocene will be framed within the world-ecology discussion (Moore 2014b), as it is the climatic result of centuries of global-systemic appropriation of human and extra-human natures.

In any case, as we have pointed out, although the Capitalocene constitutes the most robust theoretical proposal to understand the current geological period, it is not the only existing critical perspective. Moore (2016a) himself collects some of them, indicating how certain authors also oppose the Anthropocene framework by putting the focus on capitalism. As an example, we can point out the “Anthroscene” (Parikka 2014), defining this period as characterized by obscenely damaging nature or the “Wastocene” (Armiero 2021) as a period characterized by a rapid consumption leading to a planet that will soon have more waste than life within it. Ecofeminist perspectives also form a robust theoretical stream being Silvia Federici or Stefania Barca as some of its most outstanding contemporary defenders. While the ecofeminist debate on using the categories of the Anthropocene or the Capitalocene is also open, some have also proposed the use of the “Manthropocene” label, which, according to them, is useful to indicate that the social and ecological reproduction of capitalism depends both on patriarchy and the appropriation of nature. And, although there are more denominations of this period, such as the “Econocene,” the “Misanthropocene” or the “Necrocene,” in reality these labels are applied circumstantially by certain authors to refer to an outstanding characteristic of the current geological period, denying validity to the anthropogenic narrative, but without developing them as a theoretical set.

It is also worth noting that the Capitalocene perspective (as well as the other “-cenes”) has not been homogeneously accepted by all Marx readers. Metabolic Rift theorists, representing a relevant Ecomarxist school, deliberately support Cartesian dualism as a need to understand the ecological crisis because they defend that human societies exert agency over nature. In this line, authors such as Carles Soriano (2022) explicitly criticize the Capitalocene perspective and defend the green arithmetic arguing that nature can only be understood first considering the human impact on it. For these

theorists, the Capitalocene is a “political” and not “scientific” perspective, as they assume that science can be progressively neutral beyond capitalist conditioning factors. However, contemporary hegemonic science, as we can see below, is far from the neutrality and universality promulgated by scientism, being rather a partial and self-interested approach, with ambitions of universality, to the complexity of life as a totality. In this sense, we defend that Cartesian dualism is not neutral but a Western perspective dividing reality into two separate spheres whose outcome is the subjugation of nature to human civilization, legitimizing its appropriation for accumulation.

According to this, we here follow the reflective path opened by Moore, framing a proposal based on the assumption that the anthropocenic and Metabolic Rift narratives reproduce the ideological conditions that have caused climate change. However, while adopting the world-ecology perspective, we will propose to revise its understanding of the role played by modern science and technology at its foundation. In this way, we will broaden the interpretative horizon of the Capitalocene narrative towards setting its origin prior to that of capitalism itself, in a historical period in which the ideas of nature started to shape the material forces that will end up modifying the environment.

Capitalism-Technology Relationship

The Capitalocene, indeed, seems to be the most comprehensive and accurate narrative of the origin of climate change and our transition to a new geological period. The project of infinite accumulation developed by capitalism was set in motion, as we have seen, thanks to the creation of cheap nature, which in turn would arise thanks to the ideation of nature understood as an absolute externality from which the human being would be detached. This “praxis of external nature” would be executed by the different revolutions that, over the centuries, preceded the expansion of capitalism. We refer to the scientific and technological revolutions, which for Jason Moore would be “the symbolic moments of primitive accumulation” (Moore 2015a, 62–63). These would facilitate the manipulation and appropriation of ever larger areas of nature subjecting it to processes of reduction. To successfully do this, it is necessary to construct nature as external, in such a way that it has to be conceived as having no existential relationship with humanity. The narrative of the Capitalocene, therefore, adheres to the thesis of the conditionality of scientific-technological development by capitalism, so that it would be capitalism itself that forges “new ideas of nature” throughout its history (Moore 2015a, 20). Moreover, it will be capitalism that shapes ideas about human beings, and the relationship between them and nature, deriving the Cartesian humanity/nature binomial from this. Indeed, Cartesian dualism, with its

unbroken division between the human being, understood as *res cogitans* – that is to say a thinking substance –, and nature as *res extensa* – that is to say a material and manipulable substance –, sets up the assumption on which all the capitalist reflections, actions and projects stand. And this binomial, Moore asserts, would be nothing more than “an abstraction born of – and immanent to – capitalist development” (2015a, 21).¹

Other relevant authors in the critique of the anthropocenic scenario, such as Carolyn Merchant, or Christophe Bonneuil and Jean-Baptiste Fressoz, will also assume these core ideas. Merchant herself, in her work “The Death of Nature,” makes a detailed study of the thinking and the scientific-technological project undertaken by the father of modern science Francis Bacon. With him, the famous adage “knowledge is power” was popularized, which allowed Descartes himself to affirm that by knowing the forces and actions of all matter, we could use them for our benefit “and thus make ourselves as masters and possessors of nature” (1965, 178). The scientific method employed by Bacon, which would serve as a model for modern science, will always be developed in association with mechanical technology, giving birth to a new system of research that unifies knowledge with material power. In this way, technological discoveries, confronted with nature as an external substance, would have “the power to conquer and subdue it, to shake its foundations” (Merchant 2020, 183). From the time of Bacon, the posture that the scientist will have to assume will be that of the judge, who, with his instruments, his science and technology, will interrogate and subdue nature in order to wrest from it the secrets that human beings must know to be able to expand their zones of dominion. In Bacon’s own words, “the secrets of nature are better revealed under the effect of the vexations of art (*of technology*) than when they follow their course” (2003, 146), secrets that will allow “the human race to recover now its right over nature, the one that belongs to it by divine legacy” (2003, 175). These Baconian approaches, according to Merchant, do not arise spontaneously from the mind of the scientist, but are rooted in the markedly patriarchal character of the social context in which Bacon himself developed his work: a time of the rise of anti-feminist laws, as well as the hunting and prosecution of women accused of witchcraft. According to Merchant, much of the imagery Bacon employed to delineate his new scientific aims and methods “derived from the courtroom; his depiction of nature as if she were a woman tortured by mechanical implements refers directly to the interrogations of witches and the mechanical instruments used to torture them” (Merchant 2020, 179). This hostile approach to nature will become a

¹In this respect the Capitalocene perspective is thus clearly indebted to historical materialism, assuming that Descartes could not have thought what he thought, nor written what he wrote, but for the fact that he lived between 1629 and 1649 in the Dutch Republic, the “model capitalist nation of the seventeenth century” (2015a, 20).

method and will then be institutionalized in the Baconian utopia of “Salomoñs House,” his proposal for a teaching center that will inspire the current division of sciences and research work in laboratories and whose objective is the study by siege of a nature susceptible of being modified at the whim of man. Its laboratories will work with proposals ranging from bioengineering, which foregrounds current green technologies, and which aims to “make trees and flowers bloom before or after their proper season, and grow and bear fruit more rapidly than they would according to their natural course” (Bacon in Merchant 2020, 196), to geoengineering with which “we imitate and reproduce atmospheric phenomena, such as snow, hail, rain and the artificial fall of bodies” (Bacon in Merchant 2020, 198). This was envisaged in the 17th century and then realized in the 21st century because nature was thought and experienced as a machine whose parts, understood separately, could be manipulated with appropriate technologies. Mechanicism, Merchant claims, was *imposed* and “appeared when new and more efficient types of machinery accelerated the development of trade and business” (2020, 241) – i.e. in line with the Capitalocene –, and it would have its foundation in the material conditions imposed by early capitalism.

This diagnosis is also shared by Bonneuil and Fressoz, who maintain that this path goes back to the mechanicism of the 17th century, and “the sciences would thus compose a nature that liberalism and industry can mobilize, a *mundus aeconomicus* tailored to its industrious master” (2016, 224). As such the sciences would provide the necessary alibi to deploy the imperialist actions of capitalism. For example, thanks to the geologist Charles Lyell and his idea of an Earth whose antiquity and magnitude in its processes is incapable of being irreversibly affected by human activity, it would have helped to justify the globalization of prospecting in the 19th century (Bonneuil and Fressoz 2016, 42). Similarly, the chemist Eugène Pèligot, with his idea of “an immense atmosphere” capable of assimilating our small contribution of carbon dioxide, endorsed the nonchalance with which industrialism polluted the environment in the mid-19th century (Bonneuil and Fressoz 2016). However, as an effectively materialized global project, the construction of a nature functional to capitalist imperialism and the understanding of the environment as a global system that has to be dominated and optimized no longer reflects the materialism of past centuries according to these historians; rather, it takes on the appearance “of a *weltsnschauung* of ‘closed world’ forged, in each block, by the culture of the Cold War” (Bonneuil and Fressoz 2016, 108).

Today, while it is clear that nature does not give what the sciences of past centuries claimed, the idea persists, not only in anthropocenic narratives but also in those who amend it. In hegemonic spaces, and even from a Marxist perspective as the Metabolic Rift, it is still believed that our power to modify

nature by scientific-technological knowledge is the only guarantee to face climate change and prepare us to live in the new geological period (Soriano 2022). Whether this idea has its origins in the Baconian Solomon's House of the 17th century, or in the bellicose relations between the Politburo and the White House in the 20th century, capitalism appears in this narrative regardless, as the architect of a world in which Nature is an entity that we confront in order to appropriate it, and in which scientists and their instruments, knowledge and technology, have the power and prerogative to rule for the benefit of the *anthropos*. Indeed, since geopolitical and environmental problems have reached the planetary scale, relegating the agency of communities and individuals to ever narrower zones of life, "technopower" emerges as the only geohistorical guide. And the fact is that, if the problems derived from climate change find their only solution in geoengineering approaches, such as solar radiation management (Granados Mateo 2021), and even on human engineering through genetic adaptation to altered environments (Sandberg and Roache 2012), the power for governing under these *principia* remains exclusively in the hands of those who possess the appropriate technoscientific knowledge. Thus, the dream would be fulfilled that, according to Merchant, stems from Baconian utopianism, and in which scientists "not only seemed, but behaved as priests who had the power to absolve all human misery through science" (2020, 94). Capitalism, therefore, would consecrate the separation, not only between humans and nature with the Cartesian binomial, but, going a step further, it would do so between those humans who possess scientific knowledge and technological power versus those humans whose lives feed the system. In this way, capitalism would be the genuine founder of the current technocracy, always in the fulfillment of its project of infinite accumulation, which is why we could affirm that the Capitalocene would also be a Technocene (San Román 2021).

And yet, even if the capitalist project helps to explain complex aspects of this climatic period in which we live and the ways in which it is managed, the system itself, and its conditional relationship with technoscience, can in turn be explained as the concretization of a project in our historical moment that predates its genesis in the age of Columbus. If we can invert the diagnosis and maintain that it is not the capitalist project of infinite accumulation that stimulates the technoscientific development giving rise to the Capitalocene, but rather that it is the project of technoscientific domination that illuminates the possibility of capitalism, we will better understand why our world is not governed by any principle of economic rationality. Only with this reversal of perspective will we be able, as Bonneuil and Fressoz would like, "to dissolve the illusion of an optimal, efficient contemporary technical world" (2016, 317), in order to understand the rise of "negative value." And this shift in the approach to the narrative can be realized starting from an idea that Jason Moore himself has worked with; that is, if we assume that

“nature could not be made ‘cheap’ until it was rendered external” (Moore 2015a, 297), then we must accept that this idea about nature, and therefore the sciences that elaborate it, must be genealogically prior to capitalism and to Descartes himself. Before colonizing the American continent to exploit its nature as a resource, Europeans already had to assume nature as a resource in their worldview and had to contemplate the world from the partiality of a rationalist gaze in which “the world is uninhabited, denaturalized” (San Román Gómez 2022, 336). We, therefore, affirm that in order to capitalistically accumulate it is first necessary to technoscientifically dominate. Ultimately, it would be a matter of understanding that accumulation is nothing more than a mode of domination.

Capitalocene as Westernocene

Francis Bacon affirmed that with modern science “human knowledge and human power merge into one” (Bacon in Merchant 2020, 182). But the historical becoming could have manifested this power in different ways as the capitalist imperialism, because the domination of the totality of existence, from the environment to bodies through technologies, we argue, is the fruit of a thought that we will call “Western,” as a worldview elaborated at the dawn of our culture. We agree with Moore that “ideas matter in the history of capitalism” (2015a, 152), and that, therefore, only by paying attention to the ideas-force with which the West has been reaffirming itself as the dominant culture, we can understand how we have arrived at the gates of a new climatic era. In the same way that the Wasteocene account does not explain how waste impacts the environment and modifies the climate if not for its structural relationship with the capitalist system that produces it, neither can we understand the emergence and rise of a system such as capitalism, capable of changing the geological course of a planet, without thinking of it in the light of its dependence on a world of technological objects. At the same time, we must recognize its dependence on a cosmovision, which is to say on the cultural ideological vision projecting it. As the human being comes before that which he builds, the human being also comes before that which he projects to build. As Marx affirmed,

the bee shames, with the structuring of its cells, the skill of more than one architect. But what, above all, distinguishes the worst architect from the most expert bee is that he has built the cell in his head before building it in the hive. (1984, 97)

Capitalism is, therefore, the material concretion of a project of domination by technoscientific means rooted in a corpus of ideas about nature, of which the famous Cartesian binomial is but a modern appendix. This

means that although we are in the Capitalocene, this would be the product of Western cultural hegemony; that is to say, we are in a Westernocene.

In his seminal essay on the history of the idea of Nature, “The Veil of Isis,” Pierre Hadot states emphatically that the metaphor of “the secrets of nature” with which Francis Bacon plays to articulate the praxis of the scientific method, “appeared in the Hellenistic era,” approximately 1000 years before the “*novum organum*,” and that this metaphor “dominated research on nature, physics and natural sciences for almost two millennia” (2021, 60). This metaphor begins its journey, articulating the way of seeing and thinking nature in the West, with the famous aphorism of Heraclitus “nature likes to hide itself” and implies a turning point in the conception and structuring of the world; this is the moment that allows us to move from a worldview in which nature is lived and contemplated as a vital process, to a worldview where nature is reified in an unstoppable becoming of de-vivification. Indeed, the ancient pre-Socratic “*physis*” designated every natural process, which is to say every process in the web of life that arises and develops independently of human artificial intervention. This is what our word “nature” still contains in its Latin root “*nasci*,” referring to the event of arising and appearing by itself, without artifice, and both spontaneous and complex. However, Hadot continues, “after having designated a process of growth, the word *physis* has finally come to mean a kind of personified ideal being” (2021, 40), under the intellectual effort of the fathers of Western thought, Plato and Aristotle. For the Greek philosophers, the nature of a thing will no longer be the life that qualifies it but the rational essence that configures it. Thus, the idea that human reasoning can end up giving an account of the functioning of nature insofar as it replicates the functioning of rational thought will be established. For both Plato and Aristotle, nature, far from being a blind and spontaneous process, is “an intelligent force” (Hadot 2021, 43) in the manner of the concrete Greek intelligence; that is, rational and technical. Thus, another important Western preconception is founded, the Aristotelian idea of “nature’s own method,” the idea that nature does nothing in vain, but rather “acts like a wise craftsman” and “proceeds in a rational manner” (Hadot 2021, 48). The universe, as stated in the Platonic dialogue *Timaeus*, “begotten in this way, was fabricated according to what is grasped by reasoning and intelligence and is immutable” (Plato 1992, 172). In this Platonic dialogue we find, according to Hadot, one of the main influences of the Western Promethean attitude: our world is represented as an object fabricated with mathematical principles, under strict geometric proportionality, from separate parts assembled according to a mechanical model, and “which can lead to conceiving the world as a machine” (2021, 129). The mechanicism criticized by Merchant neither imposed itself nor appeared in early capitalism, but was simply consummated as a millenarian project from the long 16th century onwards.

Nature, therefore, is de-vivified from the outset, ceasing to be process and emergence, and is reified to the extent of Greek rationalism. But this was possible, as in the Baconian method, because of its unbreakable association with mechanical knowledge, so the association between theoretical knowledge and mechanical technology is not the prerogative of modern science but of Hellenism. Long before Bacon endorsed the dominating potential of technology, the philosopher Antiphon, in the 5th century BC, asserted that “through technique we master that in which we are defeated by nature” (“Antiphon” in Hadot 2021, 133), tangentially asserting at the same time, centuries before Descartes, that there is an inescapable and warlike separation between human beings and their environment. With mechanics, what Greek inventiveness intended was, already from the beginning, to master increasingly diverse aspects of nature. As Hadot explains,

mechanics, among the Greeks, appeared first of all as a technique consisting in using wiles with nature, and above all in producing movements apparently contrary to nature, in forcing it to do what it cannot do by itself, thanks to manufactured artificial instruments. (2021, 126)

These ruses, the violence that is cleverly exercised against nature, is what lives in the machine; it is no accident, therefore, that the very word to talk about the aspect of cleverness, surprise, and abrupt efficiency of the engines in Greek is “*mechané*.” Through its theoretical knowledge, both mathematical and geometrical, the substantive importance given by the main Platonic and Aristotelian schools to such knowledge, and its association with the development of machines, Hellenism appears as the true source of the project aiming at the total capitalist technologization of the world. Solomon’s House is but another step in the Hellenistic project of management and production of knowledge that the library of Alexandria represented. Founded by the Ptolemaic dynasty and honoring the project of Aristotle’s royal disciple Alexander the Great, the nerve center of techno-scientific knowledge of the ancient world gave birth to names such as Aristarchus of Samos or Archimedes, pioneering names that precede and illuminate our modern Copernicus or Galileo, and it is that, ultimately, “Greek mechanics marked the birth of technology” (Hadot 2021, 135). Not only that, the technologist vision of the Greeks and their externalization by reification of nature was so marked already in the time of Socrates that the philosopher could intuit the possibilities of geoengineering opened up by such a worldview. Neither is it in the techno-utopian Baconian vision, nor during the Cold War, but rather in the philosophical inquiries of Socrates that the possibility of something as current as climate engineering is already raised. In the work “Memorabilia of Socrates,” Xenophon indeed says that the philosopher wondered 2500 years ago, if perhaps “those who investigate divine things hope, once they know by what necessary laws each thing is produced, to be able to apply,

when they wish, winds, waters, seasons and any other of these things they need” (Jenofonte 1993, 22). The dream of governing everything with the power granted by the knowledge of divine things and the secrets of nature finds the fulcrum to effectively move the world, even to modify it geologically, in technology. And if Greece forged these ideas into the Western creed, it will be the second cradle of the West, Christianity, which will end up justifying the globalization of the project.

If for us the extrapolation of modern science from Hellenic science is justified, for the historian Lynn White, in turn, “modern science is an extrapolation of natural theology” so that even modern technology can be understood at least partially “as a Western, voluntarist realization of the Christian dogma of man’s transcendence of, and rightful mastery over, nature” (1967, 1206). The Christian dogma that “fill the earth and subdue it” (Genesis 1:28) can only really be consummated by assuming the Greek technovision. This antecedent gives meaning to the Baconian desire that the human race should recover its right over nature, which it is entitled to by divine decree. Once the human being is placed, by divine grace, at the core of creation, and sets himself up as the supreme end, everything is at the mercy of his needs. It is only then, finally, that nature can pass from being merely an externality to be technologically manipulated and becoming a property to be capitalistically exploited. Christianity and its anthropocentrization of the cosmos, in association with the Hellenistic subjugation of nature to the narrow and concrete margins of technoscience, are the fundamental pillars underpinning capitalist accumulation. Therefore, the history of climate change and the transition to a new geological period, although effectively and materially executed by capitalism itself as a world-ecology, is the culmination of a historical process founded by the West. We can thus affirm that to speak of the Capitalocene is always to speak of the Westernocene.

Conclusions

We have seen that the discussion on the Anthropocene is complex because, although it has initiated a remarkable line of studies on the existence of a new climatic period in the history of the world, it has also given rise to a profound debate on the power relations and the projects that have originated it. In the face of the widely accepted geological perspective of Crutzen and his followers, the field of political discussion has proved to be much more vibrant, showing a deep division between those who hold the idea of the Anthropocene as a framework for understanding the current climatic period and those who, like us, oppose it. Here we have reflected on the ontological problems that using the anthropocentric framework entails, pointing out how the Capitalocene perspective is better suited to a holistic understanding of the phenomenon. In this way, it would not be humanity,

understood as an abstract united block, that would be responsible for climate change, but rather capitalism as a world-ecology, whose model of appropriation of human and extra-human natures would be at the origin of the climate crisis.

Adopting the Capitalocene framework implies breaking with Western dualism, which separates human beings and nature into two distinct spheres, where the latter is subjected to the dictates of the former, in order to raise broader questions about the origin of the current climate period and the productive factors that have driven it. As Christophe Bonneuil and Jean-Baptiste Fressoz point out, “to make the Anthropocene begin around 1800 hides the essential fact that industrial capitalism has been intensely prepared by ‘market capitalism’ since the sixteenth century, including its destructive relationship to nature and human life” (2016, 254). But, by the same token, we want to point out that establishing the beginning of the Capitalocene period in the proto-capitalist 16th century, is to hide the importance that the Greek techno-rationalist worldview and its later Christian form had to explain the success in the foundation and globalization of capitalism. Because capitalism and its globalization began in a world where nature was already conceived as external, and thus as a property of human beings, we can deduce not so much that the West is Capitalist, but rather that Capitalism is Western and, therefore, that the Capitalocene is a Westernocene.

Capitalist globalization, contrary to certain anthropogenic narratives, is not the emergence of a “global culture” (Arias Maldonado 2018, 34), as if it were a new cultural entity that arose spontaneously. On the contrary, globalization, as an event, is the historical journey of the subjugation of natural and cultural diversity, in a perpetual state of emergency, by Western culture. The fact that today some of the greatest contributors of greenhouse gases that saturate the atmosphere and modify the climate are non-Western countries does not invalidate the truth of this observation, since the models that powers such as China and India replicate are nothing more than specific variants of techno-Western capitalism.

However, beyond this material evidence, the West is not only a geographical area; rather, above all, it is the ideas on which it is founded which matter (nature as external, exploitable, manipulable, as well as the property of human beings, through the implementation of rational and scientific thought, in its technological concretions). In turn, globalization becomes nothing more than the material imposition of these ideas in every corner of the globe. These ideas, as we have been able to observe, are not founded by capitalism, nor were they invented by Descartes, but rather it is capitalism that is founded upon them. Capitalism, in short, is not “scientified,” nor is it “technologized”; alternatively, Western science and technology, over time, were capitalized, in the same way that during the Third Reich they were

Nazified, or at a certain point in the 20th century they were sovietized. Capitalism, therefore, as a world-ecology, is the result of ideas that arose at the origins of Western civilization. This is why we can conclude, within the framework of the discussions of about narratives about our geological period, that our era the Capitalocene, is before anything else, the Westernocene.

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