


Territories of nature: appropriation and extinction in Brazil

Dirce Maria Antunes Suertegaray

Federal University of Rio Grande do Sul,
Graduate Program in Geography,
Porto Alegre, RS, Brazil.

Federal University of Paraiba,
Graduate Program in Geography,
João Pessoa, PB, Brazil.

Email: dircesuerte@gmail.com

 0000-0002-3513-6376

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Abstract

This article addresses my reflections upon my dialogue with De Paula over the recent years. It is a theoretical perspective that explains what I have been building throughout the research developed in Geography and the search for understanding the concepts of nature and environment. I begin by retrieving the contemporary discussion about these two concepts from reflections that make explicit the differentiation between nature (concept) and environment. I dialog with these current propositions and seek to explain the environmental construct from a geographical perspective. In this sense, I bring to the debate three dimensions that are interconnected and that allowed me to understand this society-nature interconnection as a possibility or, currently, as an analytical necessity in the face of the appropriation and exploitation of human natures and nature by hegemonic agents. The three dimensions are: the nature of nature, the territory of nature and the nature of the territory.

Keywords: nature; environment; environment in Geography

Territórios da natureza: apropriação e extinção no Brasil

Resumo

Neste artigo é apresentado um texto que revela o que, nos últimos anos, em diálogo com De Paula, tenho ensaiado. Trata-se de uma perspectiva teórica que explicita o que venho construindo ao longo da pesquisa desenvolvida na Geografia e nela a busca de compreensão dos conceitos de natureza e de ambiente. Início resgatando a discussão contemporânea sobre esses dois conceitos a partir de reflexões que explicitam a diferenciação entre natureza (conceito) e ambiente. Dialogo com essas proposições atuais e busco explicitar o construto ambiental numa perspectiva geográfica. Nesse sentido, trago ao debate três dimensões que se interconectam e que me permitiram entender essa interconexão sociedade-natureza como possibilidade ou, na atualidade, como necessidade analítica frente à apropriação e à exploração de naturezas e natureza humanas pelos agentes hegemônicos. As três dimensões são: a natureza da natureza, o território da natureza e a natureza do território.

Palavras-chave: natureza; ambiente; ambiente em Geografia.

Geography, since its origin as a field of knowledge, or even before, since Antiquity, has always been concerned with understanding space as the dwelling place of man (and women) on planet Earth. It is, therefore, a science whose guiding concept is the geographical space. Geographical space is understood as the materialization of human practices on the surface of the earth (in the broad sense). It is about reflecting on the production of space in its complex and contradictory relationship between human practices that derive from their way of producing, their way of organizing themselves socially and the construction of their culture. Under this perspective, geographical space constitutes a totality that is impossible to contemplate analytically. For this reason, this article can be read from different concepts, bringing a differentiated expression of the geographical reading of geographical space (SUERTEGARAY, 2001).

Among the geographical concepts, the proposal I have made is to insert the concept of environment, resignifying it from a geographical perspective that, in my understanding, must overcome the naturalized construction of dominant biological/ecological origin. Although the emphasis of this text is on the concepts of environment and territory, other usual concepts of Geography, such as domain, landscape, region, territory, geosystem, networks and place, should not be forgotten. Each concept allows for a different and complementary interpretation of what we conceptualize as geographical space. However, these concepts are not autonomous, since they present different analytical connections.

Many dimensions of the planet from different perspectives and scales make up the knowledge acquired and reflect the responses of various disciplinary fields. In this case, we are trying to express the view from Geography. To do this, let us imagine an experienced place, a text, an engraving, a scene from a movie, a photograph, each expressing a dimension of geographical space; breaking down these experiences, representations/images and explaining their genesis requires choices that allow us broader analytical possibilities.

These choices correspond to the concepts that will guide our analysis. Geographical space is then fragmented and restored using a filter that indicates our interests, i.e., our research concerns.

Environment is one of these concepts. It allows us to evaluate and analyze a dimension of geographical space and is addressed in other fields of knowledge, from Physics (with the idea of environment) to Biology (with the idea of environment), - just to name two examples. Talking about the environment in different areas of knowledge is therefore not the same thing. In the case of the so-called ecological sciences, the tendency is to think and analyze the environment as natural impacts, transformations/degradations of nature, with man's activity at the other end of the causal logic, often thought of in a generic way, as an exclusively biological action, produced by a devastating being.

Geography tends to have a different way of thinking, which has been made explicit by a growing number of geographers. It is well known that these ideas are not hegemonic, but they do indicate a trend. Thinking about the environment in Geography means considering the nature/society relationship, a complex and conflicting conjunction resulting from the long process of socialization of nature by humanity. A process which, while transforming nature, also transforms the human nature. There are countless examples: the production of "nature" in

laboratories (clones, transgenics, prostheses), the recent and increasingly intense densification of so-called natural nature through the use of new technologies. These modify and promote transfigurations/derivations that reach their peak with the current discussion on climate change. The transfigurations/derivations that are being expressed on a large scale are partly the result of the production of other previous derivations, those that concern degradation through the intense use of nature as a resource, in the process of producing the world, throughout the planet. But Geography must not forget that these transformations also bring about transfigurations in humans, in other words, a transformed environment is a process of complex mediations, with significant implications for people's lives in relation to their fundamental conditions of existence.

Nowadays, the production of the environment and the accumulated knowledge indicating the transformations of the Earth's surface by human labor have required a new geological look into the Earth's structures.¹ The concepts of Technogene and Anthropocene then emerged. The former reveals the objectification of the conflicting relationship/interaction between society and nature, indicating the appropriation and exploitation of natural resources and the abandonment of waste, creating forms, deposits and/or modifying landscapes. Technogenic forms and deposits materialize processes of appropriation of nature and its transfiguration, producing the environment. Therefore, these features and processes express environmental dimensions resulting from a Western culture that has conceived of nature as a dimension external to man and society.

Based on this conceptual construction, apart from the discussion on the insertion of this moment in human history on the geological scale, as suggested by the debate on the Anthropocene, it should be said that a lot of research has been done on this subject.

The most recent discussion concerns the limits of this concept, especially as a way of demarcating an era. Researchers differ on the beginning of this period and, at the same time, criticize the limits of this concept. One of the criticisms is based on the analytical perspective disseminated by the concept of the Anthropocene, which maintains the dual conception of man (society) and nature, conceiving the cause of the transformations of the earth's surface, including global climate change, as arising from human beings, seen as a homogeneous and devastating species. They are unaware of the intrinsic relationship between man and nature, both on an individual and social scale, unaware of their primordial condition of existence and unaware of the production/construction of environments as a social product. In other words, when referring to environmental degradation, the concept does not express the capitalist condition involving capital, energy, labor and cheap nature (MOORE, 2022a). This topic will be addressed hereinafter.

In the 1970s, the discussion of the transformations of the forms of the Earth's surface and the recording of deposits with the presence of human artifacts emerged in a broader way, in the manner of an "archaeology of the present", studies on this subject expanded. In this context, the analytical concern in relation to technogenic deposits consisted of: classifying

¹ The understanding of man as a geomorphological agent has been expressed in geomorphology studies for decades. Felds, in the 1950s, was concerned with this issue, among others. I first brought up this discussion in my master's dissertation (1981). Here, more precisely, I offer the example of Geology and its reading of the subject, which began when the environmental issue favored analytical constructions that absorbed this problem and the philosophical and scientific debate advanced in its reflection on scientific compartmentalization and the conception of nature and society.

and characterizing deposits; seeking to explain the historical origin of these features and the relationship between processes and forms. While technogenic deposits and forms more broadly indicated processes of social appropriation of nature, this reality was not expressed in this initial conceptual construction. Contemporary environmental issues call for this analysis.

The marks of these deposits, most of which were associated with the degradation of nature, led to the search for an understanding of the origin of these processes and, at the same time, started a geological debate that, given the magnitude of the transfigurations of nature, allowed us to think about a revision of the deep time scale (time scale) of Geology, which could identify the onset of these processes.

The suggestion for this new epoch was the proposal to delimit the Anthropocene. In addition to the controversy regarding the time that would indicate the transformations that could demarcate the beginning of this era, another debate is related to what concerns the ontological meaning of this concept and its epistemological implications.

Jason Moore (2022a), organizer of the book *Anthropocene or Capitalocene: nature, history and the crisis of capitalism*, brings together a series of texts that question the limits of the Anthropocene concept and proposes concepts such as Capitalocene (MOORE, 2022b; CRIST, 2022; HARAWAY, 2022; ALTVATER, 2022); and Necrocene (MCBRIEN, 2022).

Considering what I regard as relevant in relation to the subject, this text proposes to establish a dialog between these concepts and the understanding of territory and nature/environment that I have been building with Cristiano Quaresma de Paula (De Paula and Suertegaray [2018] and Suertegaray [2017; 2021], taking as a reference dimensions of the Brazilian reality experienced in recent years [2017-2022].)

Using the book organized by Moore (2022a) as a reference, the concept of the Capitalocene arose in dialogue with Andreas Malm (2009). This dialog, centered at the University of Lund, led, over the years, to the construction of the concept of the Capitalocene as “a set of multiple species, a world-ecology of capital, power and nature” (MOORE, 2022, p. 10).

The main arguments criticizing the Anthropocene (CRIST, 2022) include: the persistent Cartesian separation of nature and society, the validation of the superiority of the human species through the dissemination of the ever-increasing need for research and technological development as a possibility of overcoming the environmental impasse (Geoengineering), i.e. the environmental problems arising from capitalism in today’s world; the failure to make the contradictory explicit; power, social class, nature and nature (concept) as an instance separate from social man; and the strengthening of man conceived as a geological force indistinctly, homogeneously, in a context of more than obvious implications between power, social class and nature (s).

Moore deepens this view (2022b) when he states that given the current environmental conditions:

we move from the consequences of environment-making to its conditions and causes. And once we begin to ask questions about human-initiated environment-making, a new set of connections appears. These are the connections between environment-making and relations of inequality, power, wealth, and work. We begin to ask new questions about the relationship between environmental change and whose work is valued—and whose lives matter. Class, race, gender, sexuality, nation—and much, much more—can be understood in terms of their relationship within the whole of nature, and how that nature has been radically remade over the past five centuries. (MOORE, 2022b, p. 129-130).

The author explains that World-ecology does not refer to the “ecology of the world.” Such ecology is not the ecology of Nature—with uppercase N—but the ecology of the *oikeios*: the creative, generative, and multilayered relation of life-making, of species and environments (MOORE, 2022b, p. 131). In his text, he addresses the debate about the beginning of the Anthropocene or Capitalocene, the concept with which he works. He suggests that its beginning is associated with the processes of primitive accumulation, colonization, private property, proletarian labor and the exclusion of significant portions of humanity. Moore also discusses the appropriation of nature (cheap nature), either from human labor or as resources incorporated into the production process. This historical moment would constitute the condition for a rupture with a more organic world, allowing the expansion of capitalism to continue. In other words, the advent of the Capitalocene would have been constituted as a process prior to the advent of the Industrial Revolution (18th century), expressing its magnitude of exploitation/spoliation today.

According to McBrien

Capital was born from extinction, and from capital, extinction has flowed. Capital does not just rob the soil and worker, as Marx observes, it necrotizes the entire planet. Here is a “metabolic rift” (Foster 2000)— [2005] between earth and labor—driven by the contradictions of endless accumulation (Foster, 2000. (MCBRIEN, 2022, p. 189).

Summarizing the author’s ideas:

the concepts of the Anthropocene and the Capitalocene recognize extinction but have yet to grasp its ontological significance – for humanity or for capitalism. The concept of Necrocene is then proposed as the period where the accumulation of capital is the accumulation potential extinction - increasingly activated in recent decades. A period in which species, languages, cultures, and peoples disappear, either because of labor or murder. (MCBRIEN, 2022, p. 189-190).

Thus, nature (in lowercase letters) is extinguished through its degradation, degeneration, transfiguration and death.

Therefore, capitalism has built environments, both in their material production and symbolically/conceptually. In this construction, Parenti's (2022) considerations on the role of the state in creating the Capitalocene/Necrocene environment are important for our purposes. What emerges from his reading is a somewhat neglected dimension of the state, that in which the state mediates the capitalist relationship with nature.

The author brings the State to the center of the discussion. His argument is clear: "Just as capital does not have a relationship with nature, but is a relationship with nature, this is always a relationship with the state and mediated by it" (PARENTI, 2022, p. 274).

For the author "the state is an inherently environmental entity and as such is at the heart of the value form because the use values of non-human nature are sometimes central sources of value" (PARENTI, 2022, p. 274).

The above-mentioned author places the state, and certainly power, in the mediation between non-human nature and capital; this is one of the dimensions that constitutes the Nature of the Territory. According to Parenti (2022), it was this matrix of geo-power that allowed for the use of techno-rational practices supported by scientific development that enabled the appropriation of non-human nature for capitalist exploitation. Regarding the State as Geography, the author remarks:

When the State and Geography meet, the focus is on how the "geographical scale" modifies and articulates the political functions of the State. The biophysical importance of the geography of the State is rarely addressed as a place for the use values of nature. Theories of value with an environmental concern, on the other hand, do better to think of geography as a relative of the real means of production (Burkett, 1990; Moore, 2015a). But here the problem of State theory is reversed - value is emphasized, but the state disappears. (PARENTI, 2022, p. 283).

In summary, what this author's reading allows us to understand is that the state appropriates non-human nature and humanity through natural energy as a labor force, resources and their use values transformed into exchange value based on the constitution of land ownership. This appropriation by the state historically takes place for capital and is realized through force, during the conquests of territories, the enclosure and creation of private property and indirectly, by creating infrastructures and new landscapes in its territorial domain.

In other words, the State has its demarcation in the territory. These are essential political units for capitalism, since it is the state that manages, mediates, produces and makes nature available to capital. The Capitalocene can perhaps be thought of as emerging, as Moore (2022) and Parenti (2022) say, from the process of metabolic rupture since the centuries of navigation/colonization and primitive accumulation. In this process, it is transformed into what is currently known as Necrocene (MCBRIEN 2022).

Environmental construction through the eyes of Geography

In this section I discuss the environmental construct that I have been building through research and dialog with De Paula, based on actions with traditional communities, in particular artisanal and riverine fishermen. During the process of mentoring and shared research, the construction that has been brought up in a dispersed way throughout my academic production, expressed in different publications, becomes explicit, as summarized by De Paula (2020)². In the debate, having identified the perspective that had been built up by this author, the first publication was the joint article (DE PAULA; SUERTEGARAY, 2018). I expanded this reading to emphasize the connection between Territory and Environment, which we call the environmental construct (2021). This construction is based on a triad called: the nature of nature, the territory of nature and the nature of the territory.

The nature of nature, the territory of nature and the nature of territory.

The **nature of nature** implies demarcating territories/ through peculiar processes, including those of human beings as biologically instituted. When referring to natural demarcation, Serres (2011) gives examples of animal and human practices under this configuration (SUERTEGARAY, 2021, p. 116).

The **nature of Nature** is the primordial condition for the existence of humans and non-humans and is expressed in its spatial-temporal variability, its diversity, its scope and organization - autopoiesis³. In other words, nature is eco-self-organizing (MATURANA; VARELA, 2010).

This self-organization is a historical and congruent journey in forms, structures and substances and, while diverse, its totality is expressed in networks and interactions. This nature (lower case) is the materiality of reality, expressed in the combination of matter and energy. This nature has been replaced by Nature (capital letter), a concept, and has become, since the Cartesian construction, a condition of use and commercial appropriation, or resource, as it is understood today. From this perspective, it is possible to dialog with Moore (2022), who informs us that nature becomes Nature (with a capital letter) based on the superiority of the human species which, in the historical context, separates itself from nature and constructs itself as a superior nature, capable of transforming it for its own benefit beyond its dimension of use, in other words, it starts to have an added value, the value of exchange. This practice is evident when we refer to the deforestation of the Amazon and other Brazilian biomes.⁴

2 For the first time, the three dimensions discussed herein have been extracted from different papers of my own, retrieved and interpreted by De Paula (2020), p. 201-226.

3 *Living beings are characterized by the fact that they literally produce themselves continuously, reason why we call the organization that defines them, autopoietic organization.* (MATURANA; VARELA, 2010, p. 25).

4 The number of deforestation alerts in the Legal Amazon during 2022 is the worst in the historical series: 10,267 km², from January to December 30. The data has been measured annually since 2015 by the Space Research Institute. Available at: <https://www.cartacapital.com.br/cartaexpressa/alertas-de-desmatamento-em-2022-bateram-recorde-na-serie-historica-aponta-inpe/>.

The **territory of nature** implies the intertwining of nature and society, i.e., natural conditions impose themselves on social dynamics. This dimension is mediated by human labor, i.e., human groups (both native and traditional) are amalgamated with nature (nature's nature), building with it the production of their existence, whose value is of use. In the territory of nature, there is a metabolism between beings in their entirety, including human beings, constructing means, living spaces.

The nature of the territory, on the other hand, is established by the paradigm of colonization/modernization, through signs that de-characterize the territory of nature. The contradiction revealed in the appropriation of nature by human labor can be expressed in material and immaterial (symbolic) dimensions, i.e., appropriating nature as a material or symbolic resource, such as water for consumption or landscapes and their natural resources, for example. This appropriation, insofar as it is contradictory, generates impacts, disputes and conflicts of different kinds, which can be seen in fishing communities. At the same time, it dialectically promotes a metabolic rupture between these communities and their territories (Nature's territories) insofar as these disputes generate pressure and sometimes abandonment of their spaces of shelter and sustenance. (DE PAULA; SUERTEGARAY; 2018).

Continuing the discussion from the thesis by De Paula (2018a) and De Paula and Suertegaray (2018), a synthesis of the understanding of these territories is expanded in Suertegaray (2021). In this process, a dialog is built with Serres (2011), who summarizes the transition from the territory of nature to the nature of territory (Capitalocene), now transfigured into the Necrocene.

Thus, the territories of Nature express the “clean” as a constituent of the territories and traditional territorialities of artisanal fishing communities, among others, and the nature of the territory is the expression of “the dirty” taken as the territory of modernization. (Suertegaray, 2022). Three facets are considered in this construction: degradation, overexploitation and the restriction of access to and expropriation of land (De Paula, 2018). Serres (2011) distinguishes between two types of pollution: hard and soft pollution. Hard pollution would be represented by all kinds of waste dumped in different places. Soft pollution would be the “pestilential invasion of spaces by signs” (Serres, 2011, p. 59). It should be noted that, to discuss the facets of modernization (of the dirty) in Brazilian artisanal fishing, De Paula (2018) presents three correlations between the concepts of environment and territory: environmental impacts, disputes over territory and conflicts over territory. Environmental impacts relate to the idea of hard pollution, as they presuppose an intense process of transformation of the environment, which makes it impossible to continue using it, in this case for fishing. On the other hand, disputes in the territory and conflicts over territory are related to the idea of soft (pestilent) pollution, since they deal with the advance of other economic activities, either disputing the territory's resources

or seeking to dominate it, almost always using symbols that promote the deconstruction of the lives of traditional peoples... (SUERTEGARAY, 2021, p. 117).

In the case of environmental impacts, their repercussions on communities that depend on local resources are analyzed. This is one of the dimensions in which the appropriation of nature by agents of capital, on a national scale (Brazil), operates on a large scale, such as deforestation, illegal mining and the advance of agribusiness over indigenous territories, *quilombolas* and other communities. This misappropriation is overwhelming, especially in relation to indigenous lands, e.g., the illegal mining on indigenous lands, which has culminated in the genocide of the inhabitants of the Brazilian Amazon, such as in the Yanomami territories⁵, having also heavily impacted other regions, such as the Pataxós lands in the south of Bahia and other ethnic groups in the national territory.

In what regards the disputes over territory, De Paula (2018) points out that for artisanal fishermen to be able to reproduce their lives while maintaining their fishing management practices, it is necessary to preserve the integrity of their fishing grounds.

Territorial disputes are common on Brazilian territory, including invasions of indigenous lands, quilombola lands and the territories of artisanal fishermen. In this case, the action (dispute) goes beyond environmental impacts, expressing conflicts over territory, power and the struggle for land. The most emblematic example is deforestation in the Amazon due to the advance of agricultural activity (agribusiness) and clandestine/illegal mining.⁶

At first, deforestation is the most widely noticeable environmental impact. Then, the appropriation of wood (cheap nature), which enters the market, capitalizes the invading “entrepreneur”. The same goes for clandestine mining. The process begins with deforestation, followed by the appropriation of timber, mineral exploitation, gold, diamonds, cassiterite, trade and capital accumulation. The trail of impact beyond deforestation is the contamination of rivers with mercury (clandestine mining),⁷ the consequent disruption of the metabolism of local

5 The Yanomami indigenous people, one of the first to have their land rights recognized by the state after the Constitution was approved in 1988, are going through what could be considered the worst threat since the approval of the Indigenous Land, which will be 30 years old in 2022. This was reported in “Yanomami under attack: illegal mining in the Yanomami Indigenous Land and proposals to combat it”, published by the Hutukara Yanomami Association. Available at: <https://www.epsvj.fiocruz.br/noticias/reportagem/invasao-do-garimpo-em-terras-indigenas-deixa-rastro-de-desmatamento-e-violencia/>. Accessed on: Feb. 24, 2022.

6 The Deter system of the National Institute for Special Research was created as part of the action plan to prevent and control deforestation in the Legal Amazon in 2004. The daily early warning is intended to facilitate monitoring and try to curb deforestation. In 2015, the system was improved: two other satellites were used, including a Brazilian satellite developed in partnership with China. The full figures for a year were only recorded in 2016, when Dilma Rousseff was president. Alerts fell in 2017, under the Temer government, and rose in 2018, still under Temer. As of 2019, the first year of the Bolsonaro administration, the area of deforestation in the Amazon Forest jumped and remained above 8,000 km², reaching 10,267 km² in 2022. This devastation is equivalent to an area almost seven times the size of the city of São Paulo. The states with the most deforested areas in 2022 were Pará, Mato Grosso and Amazonas. And it is in this state that we are most concerned now. Available at: <https://g1.globo.com/jornal-nacional/noticia/2023/01/06/inpe-divulga-recorde-de-areas-com-alertas-de-desmatamento-na-amazonia-em-2022.ghtml>. Accessed on: Feb 24, 2022.

7 In addition to deforestation and the contamination of rivers and fish that serve as food for the indigenous people by mercury, a metal used in mining that was recently identified by the Oswaldo Cruz Foundation (Fiocruz) at levels well above those recommended by the World Health Organization (WHO) in indigenous people of the ethnic group, the invasion of illegal mining has caused conflicts, violence and deaths, as well as an explosion in the number of infectious

populations with nature and the destruction of their territories of life and the extinction and death of their population. This is the extinction of nature's territories.

Conflicts over territory expose tensions and disputes between, on the one hand, communities that have made it possible for the environment to remain in a state of metabolism, meeting their needs, and, on the other hand, external economic agents who see the appropriation of cheap nature (MOORE, 2022) as the potential for the advance of capital.

The environmental impacts, disputes and conflicts reveal the nature of the territory built from the modernization of representations that supported the understanding of nature as separate from man (society), based on the Cartesian construction of Nature. The capitalist and private appropriation of land separates nature in order to appropriate it as something else, something that gives it resources beyond its use values. This appropriation generates conflicts and disputes of different magnitudes. It is a metabolic rupture that constitutes the deconstruction of communities.

The expression of this metabolism present in original and traditional communities suggests an organic relationship with nature in which "practical tradition" and knowledge guarantee the unity of nature and human nature and "universal" nature. This is what we call the territory of nature. In this process of advancement, De Paula (2018) presents a sequence of stages, described by Suertegaray (2022):

It should be noted that native, traditional and extractivist peoples have sufficient means of production to meet their material needs, which is why the territory is delimited by signs, which constitute the nature reserve. When the boundaries are not respected by outsiders or when part of the territory is not accessible to the group, a crisis arises. The loss of autonomy results in an imbalance, which can lead to the disappearance of the group (Raffestin, 1986, p. 78). Therefore, autonomy depends on maintaining the reserve in the territory. In appropriation, we start from a picture of nature (Moscovici, 1968), which is not expressed in the territory - what Suertegaray (2002) calls the territory of nature. At this stage, the territorialities are expressed from the knowledge that is established about the space in order to access the resources. (SUERTEGARAY, 2022, p. 165).

Additionally,

In the territories of nature, the knowledge of location and the techniques used to obtain it constitute power. Power is expressed in this type of knowledge, which is shared among community members through traditional knowledge, which in turn gives rise to practices

diseases such as malaria in the territory. The document also points to the dismantling of health services in the areas occupied by the miners. The Yanomami indigenous people, one of the first to have their land rights recognized by the state after the Constitution was approved in 1988, are going through what could be considered the worst threat since the approval of the Indigenous Land, which will be 30 years old in 2022. This is what the report 'Yanomami under attack: illegal mining in the Yanomami Indigenous Land and proposals to combat it', released last Monday (11) by the Hutukara Yanomami Association, denounces. Available at: <https://www.epsjv.fiocruz.br/noticias/reportagem/invasao-do-garimpo-em-terras-indigenas-deixa-rastro-de-desmatamento-e-violencia/>.

of use. The information inherent in this knowledge is functional and regulatory, so it is managed through agreements between community members. However, within the community, power does not imply domination, as knowledge is shared through verbal agreements on its use. From a relational perspective, this power is a flow; a process of successful communication, based on common objectives. (Raffestin; Barampama, 1998).

The third stage corresponds to the context in which, due to the reduction in fishing resources and/or the pressure to increase production, the knowledge that provided common use is converted into strategies for appropriation and domination (expressing the reduction in clean territory). In this scenario, disputes over resources are established, which can result in impacts and conflicts at the community or inter-community level. Power is presented as an attribute, acquired, maintained and lost through actors (Raffestin; Barampama, 1998). This is what Suertegaray (2002) sees as the nature of territory, since power relations impose themselves on knowledge and social/community relations. Within the community, tensions arise from disrespect for established rules, revealing fissures and the erosion of traditional knowledge. Communities often claim the right to exclusive use of the territory, establishing boundaries and strategies for maintaining these boundaries. At this point, we see what Marx called metabolic failure or the concept of metabolism, understood as the process by which human beings, through their actions, mediate, regulate and control the metabolism between themselves and nature (Suertegaray, 2017, p. 2011). This concept (metabolic failure) is the essence of understanding men's separation from nature and their progressive alienation. (SUERTEGARAY, 2017, p. 165).

It should be noted that the metabolic failure in the constitution of original and traditional (clean) territories stems from the reduction of resources, forest, water and fishing resources, among many others, for example, for indigenous peoples. This rupture or metabolic failure is a product of the advance of capitalist exploitation over territories of nature, promoting "dirty" territoriality, which manifests itself in degradation, pollution and extinction. In this way, the reduction of the "clean" territory of the original and traditional territories stems from the advance of the "dirty" territory. With this reduction in "clean" territory, as exemplified here with indigenous territories, there is a disorganization of social ties, restriction of access to material goods whose value for the communities is one of use, as well as the internal generation of conflicts emanating from agents outside the community.

Modernity, thinking of time as an arrow/float and promoting the exploitation of nature's territories, indicates a rupture in the passage of time, a battle in which there are winners and losers, with the winners always being rewarded, in other words, the agents outside these territories, the capitalists. The conceptions of time manifested in the societies that make up territories of nature are expressed as cyclical time, since their activities are governed by the dynamics of nature: river floods and droughts, day and night, fallow time and planting time, among others. The deconstruction of this time, the time that makes, the time of rhythms, of variability, is imposed by the rupture of this dimension in favor of a time that, being linear and continuous (of

the winners), deconstructs their experiences. They would be vanquished if it weren't for the fact that they have been resisting since the arrival of "modernity" with the colonizers, a process that continues in this phase of capitalism.

Summary

Modernity is expressed in a variety of pairs and dualities, including time/space, man/nature, nature/culture and nature/society. In this historical period, which is currently being questioned, nature was understood and constructed as a concept independent of the concept of humanity. This duality became essential to capitalist expansion, the roots of which date back to the colonial period. This duality can still be seen today in the conflicts over territory/territorialities which, imbued with this representation, have replaced the understanding of the world as organic (ancient), with the world as a social product independent of nature.

At the heart of the territorial disputes between indigenous populations, ranchers and miners are these dualities. For the traditional populations, the world is organic in its material and immaterial fullness, for the invaders, land grabbers or miners, led by the logic of capitalist exploitation, nature is external to them and constitutes a resource (cheap nature) to be appropriated. To do this, it is necessary to invade lands conceived as "unproductive", exploit their resources, promote planetary circulation, such as gold, cassiterite extracted from Yanomami lands and exterminate their populations, whether through the spread of disease, malnutrition or violence to their bodies in different manifestations.

The genocide in this part of the Brazilian territory is an example of inhumanity under capitalist logic, which is also based on the mediation of the state when it creates access infrastructure, promotes or deregulates legislation to protect territories and even landscapes, as occurred intensely in Brazil (2019-2022), revealing that the invasion of Indigenous Lands has been the rule. In a document released by *Greenpeace*, the rivers destroyed by mining in the Munduruku and Sai Cinza Indigenous Lands, in the state of Pará, are expressed in the following historical sequence: up to 2016, 26.6 km; 2017, 39.3 km; 2018, 88.5 km; 2019, 178 km; 2020, 235.3 km; 2021, 65 km (partial data up to October 2021). In total, 632.8 km of rivers have been destroyed by mining, including the Marupá, Das Tropas and Cabitutu rivers, in addition to other impacts caused directly to these indigenous peoples.⁸

The permanence of original and traditional societies depends on the simultaneous presence of functional information and regulatory information about their territories and the processes involved in maintaining their existence. What happens in the invasion, appropriation and extermination of the Yanomami is regulation and deregulation from outside the communities. There are power conflicts between the territory on a national scale (the state) and indigenous

8 Kilometers of rivers destroyed by mining in the Munduruku and Sai Cinza Indigenous Land. In addition to the environmental damage and preventing the use of these waters for the people's vital needs, such as fishing, the contamination of these rivers also causes enormous cultural damage to the Munduruku, damaging their cultural ties with the environment and denying their right to be and exist. Mining also suppresses Permanent Preservation Areas (APPs), deforests contiguous forests and causes the opening of roads and branches, generating even more deforestation. Available at: <https://www.greenpeace.org/brasil/blog/a-morte-dos-rios/>. Accessed on: Feb 25, 2022.

territories, as well as other local territorialities. These conditions impose environmental impacts, territorial disputes and conflicts over territory.

The territory of nature comprises nature as a universal concept (in which the human being is included) and expresses an organic functionality. The expression of this conjunction is metaphorically identified as “barely clean”, considering the logic of capital. The nature of the territory includes the rupture in the metabolism between human beings and the environment. This rupture is the product of the progressive transformation of nature into second nature and its valuation as exchange value, as Marx already expressed and which is currently being revived (FOSTER, 2010). In this historical condition, human beings are separated from nature, and nature is conceived as external to the subject. This is an object of appropriation, domination and exploitation, especially associated with the expansion of science, since the objects produced from it and nature itself become commodities. This is the nature of territory, since its appropriation reveals political intent and asymmetrical power between the human beings who make up societies and between societies and nature. The environment is disrupted (territory of nature) and environments are built (nature of the Territory).

Environments, in turn, reveal material and representational disputes. They can be clean and democratic, but they can also be dirty, domineering, conflicting environments. The natural environment is organic and expressed in natural networks, which include man. Environments are a social product that expresses the way in which societies, especially Western/capitalist societies, have conceived of nature as external and therefore subject to subjugation, as Bacon said at the advent of Western rationality: nature as feminine must be known and subjugated.

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SUERTEGARAY, D.M.A.