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Dynamics of the expansion and appropriation of natural resources on the frontiers of the Brazilian and Venezuelan Amazon: a “link” between primitive accumulation and the development of capital¹

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Abstract

On the frontiers of the Brazilian Amazon and the Venezuelan Amazon, the growing increase in human populations has constituted a substantial part of the ecosystems in which they live. The scale and intensity of human occupation has caused a series of significant and differentiated environmental impacts not only on a local level, but also on a national and global level. The current impacts caused by human actions on ecosystems on the frontiers are varied: indiscriminate deforestation, illegal logging, in addition to unlawful mining activities. Within this context, the main aim of this article is to discuss the process of primitive accumulation and the development of capital under the logic of expansion and appropriation of natural resources on the frontiers of the Brazilian and Venezuelan Amazon. In order to achieve this, the article will use a deductive-inductive approach combined with exploratory qualitative research. The main conclusion is that the fragmentation of the Amazon forest, into a landscape made up of small sections, has contributed to a reduction in the biodiversity through a wide variety of mechanisms, including the practice of deforestation, logging and mining, many of which are carried out illegally, criminally and most often in frontier areas. This has come about because the structure of these societies in frontier territories tends to be “dominated” and “influenced” within the terms that the ideology of capital imposes, including resorting to methods of primitive accumulation. Therefore, the frontier

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must be understood in its most comprehensive form as a social relation of production, or rather, as an essentially capitalist social relation of production

Keywords: Frontier(s); Brazilian Amazon; Venezuelan Amazon; Primitive accumulation; Capital development; Natural resources

Dinámicas de expansión y apropiación de recursos naturales en las fronteras de la Amazonía brasileña y venezolana: un “vínculo” entre acumulación primitiva y desarrollo del capital

Resumen

En la(s) frontera(s) de la Amazonía brasileña y la Amazonía venezolana, el creciente aumento de las poblaciones humanas ha constituido una parte importante de los ecosistemas en los que viven. La escala e intensidad de la ocupación humana ha provocado una serie de impactos ambientales significativos y diferenciados no sólo a nivel local, sino también a nivel nacional y global. Los impactos actuales causados por la acción humana en los ecosistemas de las fronteras son diversos: deforestación indiscriminada, explotación forestal irregular, además de actividades mineras ilegales. En este contexto, el objetivo principal de este artículo es discutir el proceso de acumulación primitiva y desarrollo del capital bajo la lógica de expansión y apropiación de los recursos naturales en las fronteras de la Amazonía de Brasil y Venezuela. Para lograrlo, el artículo utilizará el método deductivo-inductivo combinado con una investigación cualitativa-exploratoria. La principal conclusión es que la fragmentación de la selva amazónica, en un paisaje compuesto por pequeñas secciones, ha contribuido a la reducción de la biodiversidad a través de una amplia variedad de mecanismos, entre ellos la práctica de la deforestación, la tala y la minería, muchos de los cuales son llevados a cabo de forma ilegal, criminal y, la mayoría de las veces, en zonas fronterizas. Esto es así porque la estructura de estas sociedades en territorios fronterizos tiende a ser “dominada” e “influida” dentro de los términos que impone la ideología del capital, incluida la aplicación de métodos de acumulación primitiva. Por lo tanto, la frontera debe entenderse en su forma más integral como una relación social de producción, o más bien, como una relación social de producción esencialmente capitalista

Palabras clave: frontera(s); Amazonía brasileña; Amazonía venezolana; acumulación primitiva; desarrollo de capital; recursos naturales

Introduction

In general terms, both on the frontier of the Brazilian Amazon –with an area of approximately 421,335,900 hectares²– and on the frontier of the Venezuelan Amazon

2 According to PROJETO MAPBIOMAS (2023).

–with an area of 47,021,900 hectares³– there has been a growing increase in human populations, thereby constituting a substantial part of the ecosystems in which they live. From a historical viewpoint, however, the scale and intensity of human occupation has caused a series of significant and differentiated environmental impacts, not only locally, but also nationally and globally.

The impacts caused by anthropic actions, i.e., by human activities on the terrestrial ecosystems of both the Brazilian and Venezuelan Amazon, include the effects of illegal deforestation, logging and large-scale mineral activities in the region. The aquatic ecosystems of the Amazon, for example, have been affected by large hydroelectric dams, waterways, the predatory exploitation of fishing resources and air and water pollution from oil and mercury used in clandestine mining. More than a chronic problem, it's a historical problem.

Production that had previously been small and sold as a natural product, from the end of the nineteenth century, began to be produced on a large scale, which required intense productivity and capital accumulation. In contemporary reality, according to Leal (2010:121): "(...) *The Amazon will always be an object of looting. Its natural resources will always be at the service of reducing the costs of capital, on the frontiers of capitalism to serve profit, the engine of accumulation*".⁴

Many of the current, and anticipated, environmental changes have negatively affected the environment on the frontiers of these different Amazon regions and, consequently, in other places in the world. These changes have caused a series of negative implications, such as: decreased productive capacity of ecosystems, low rainfall, reduced water cycling due to loss of evapotranspiration, climate change and increased greenhouse effect, among other environmental problems that have caused damage to the process of recycling water, an essential element for man and biodiversity.

The environment in this context is often used to represent all chemical, biological, ecological and geographic systems, either on a local, regional, national or even global scale. While these systems may be degraded in several different ways, it is the human activities that are mainly responsible for the impacts on natural resources, both directly and indirectly.

Thus, the increasing loss of the largest tropical rainforest on planet Earth – the forest in the Amazon region – has caused a series of climate changes beyond its frontiers. As the process of human occupation has advanced, the quantitative and qualitative destruction of natural resources on the frontiers of the Amazon has also occurred, very often, through the process of capital accumulation *pari passu* with primitive accumulation⁵.

In practice, as the bases of the capitalist mode of production move in a vicious circle (as yet, not virtuous) on the frontiers of Venezuela and Brazil, it may be assumed that prior to this process there was accumulation. This was not a consequence of the exploitation of surplus-value, but rather a primitive accumulation, which represented the dissociation of the producer from his means of production and subsistence.

This process has been based on a series of violent methods –including land expropriation– which established the essential foundations for the development of capitalist

3 According to PROJETO MAPBIOMAS (2022).

4 This and all other non-English citations hereafter have been translated by the author.

5 The primitive accumulation of capital, also called prior or original accumulation, is a historical process preceding capitalist accumulation, "an accumulation not the result of the capitalist mode of production, but its starting point", as determined by Marx (1889:736).

production on the frontiers of Brazil and Venezuela. In this context, the main objective of this article is to discuss the process of primitive accumulation and the development of capital under the logic of the expansion and appropriation of natural resources on the frontiers of the Brazilian and Venezuelan Amazon.

To achieve this objective, in addition to this introductory section, the article has been organized into five sections. Section 2 presents the methodological aspects of the research and section 3 discusses the process of capital accumulation as a key element for understanding the dynamics of capitalist expansion across frontiers. In the fourth section, the historically imposing nature of capital in the context of work and workers across frontiers is discussed and, lastly, the final considerations are presented.

Study methodology and methods

Methodological specification is a mandatory part of academic research that adopts a scientific method. However, it is necessary to distinguish the methodological approach from the stated research methods. The methodological approach is concerned with the philosophical affiliation and with the level of abstraction of the studied phenomenon, while the methods of investigation or research procedures consist of concrete steps of investigation plus the use of appropriate research techniques.

In the area of general social sciences, there is an enforced methodological restriction, which is the need for a confrontation between the conceived reality, abstracted from the concrete, and the empirical reality, i.e., that which is perceived by our senses. On the other hand, as Lakatos and Marconi observed: *“practical knowledge is subjected to the need for an immediate connection with the reality to which they are related.”* (1991:106)

In theoretical research, unlike empirical research, which is a research method based on the field studies of primary or even secondary data, the research method is more linked to the method of exposing ideas: whether deductive or inductive.

Thus, the method used herein involves the deductive method, since it starts from a general stance, i.e., a discussion involving a theoretical basis for understanding the expanding dynamics of capitalism on the frontier of the Brazilian Amazon and Venezuelan Amazon. As well as the inductive method because it considers the specifics, i.e., the role of primitive accumulation in the context of capital development on the frontiers.

In addition, the article will also gather as much information related to the subject as possible using an exploratory qualitative research technique, with the aim of expanding information on the subject through books, articles from journal and other key references. According to Silva and Menezes:

[Qualitative research] considers that there is a dynamic relationship between the real world and the subject, which is an inseparable link between the objective world and the subjectivity of the subject that cannot be translated into numbers. Interpreting the phenomena and attributing meaning are fundamental to the qualitative research process. It does not require the use of methods and statistical techniques. (...) The process and its meaning are the main focuses of the approach. (2005:20)

With regard to exploratory research, according to Gil:

“Exploratory research aims to provide greater familiarity with the problem

in order to make it explicit or to construct hypotheses. It involves a literature review; (...) an analysis of examples that stimulate understanding. It generally takes the form of bibliographic research and case studies." (1991 apud Silva and Menezes, 2005:83)

The following section aims to discuss the process of capital accumulation as a key element for understanding the dynamics of expansion and capitalist appropriation on frontiers.

The process of capital accumulation as a key element for understanding the dynamics of capitalist expansion across frontiers

The development of a society may only be discussed in terms of specific historical periods and particular social structures (formed by the totality of production relations), whereby the study of the various pre-capitalist modes of production should be considered as a clear example of this.

Marx (1964) suggested that the evolution of human history may be studied through modes of production that range from primitive communism, slavery, serfdom, Asian, feudalism and capitalism through to the many eras of progress in the formations of a given society. It is within this context that pre-capitalist economic formations somehow seek to formulate the content of history through a more general perspective.

This content, as the foundation for a theory of history, is the historical progress of humanity. The objective basis of the theory of socioeconomic evolution comprises an analysis of the human being as a type of social construct. Indeed, it is through man's interaction with nature that social progress is produced with the evolution of time. As seen in Marx:

"Man —or rather men— perform labour, i.e., they create and reproduce their existence in daily practice, breathing, seeking food, shelter, love, etc. They do this by operating in nature, taking from nature (and eventually consciously changing nature) for this purpose. This interaction between man and nature is, and produces, social evolution." (Introduction by Hobsbawn, 1964:12)

Within a society in which man is considered a social animal, there is the division of labor and surplus production, making the exchange process possible. Under these conditions, any action by humans on nature is an appropriation of nature that manifests itself only as an aspect of the work that Marx (1964) expressed in the concept of property, which should not be identified with the specific form of private property.

The worker's relationship with the objective conditions of his work (found in nature) is that of property, which incidentally, as Marx (1964) stated, constitutes the natural unity of work with its material prerequisites. For Marx: "Progress of course is observable in the growing emancipation of man from nature and his growing control over nature". (1964:13)

In these terms, it is necessary to establish the general mechanism of all social transformations, formulating the content of history in its most general form. This content, in short, would be progress, which is something that is objectively definable.

In the pre-capitalist economic formations however, Marx (1964) overcomes this limitation to explain the historical evolution of humanity, taking primitive communist

societies (where there is no class society and the social division of labor is simple) as a starting point.

From these, evolve different forms of property (communal, private peasant, feudal and private bourgeois) and, consequently, social modes of production. In the conception of Fioravante (1978), for example, a mode of production is characterized by a type of unit that is a dominant complex whole, where one of the structures it composes dominates the others, exerting an influence on them.

Thus, a mode of production may be characterized as a combination of elements, such as: worker, non-worker, means of production. That is to say, the mode of production is formed by the productive forces and production relations that exist within a given society. In practice, the mode of production must be conceived as the way in which society organizes itself as a whole with the aim of guaranteeing its own subsistence.

The instruments used to transform the object are called means of labor, as they represent a set of “things” that the worker places between him and the object on which he works. In the broadest sense, the means of labor comprise all material conditions that, without directly intervening in the transformation process, are indispensable for its completion, such as: land, roads, buildings, i.e., all material factors without which work and the worker are inconceivable.

That said, it is the movement made by capital (K) that produces a series of repercussions within the capitalist mode of production. It may be described in the following terms: M (capital in the form of money); C (a set of commodities with which it produces its own); and through the sale of this, M' is obtained. It is, however, in Karl Marx's well-known simple circulation model, $M - C - M$, that money (M) is placed before purchasing goods (C) as money in itself and for itself.

The transformation of money into money-capital: $M-C-M'$, begins as follows: first, money, which is the appropriate exchange value resulting from the circulation of commodities, enters and exits circulation to perpetuate itself, valorize itself and, after this short circuit, gain autonomy in the form of capital. This is because, in the form of money, capital increased by surplus value is transformed into profit for the capitalist; or rather, the reason for the process known as capital accumulation. With regard to this issue, Carvalho et al. stated that:

“(...) by discovering the principle of surplus value and the methods of extraction, of the exploitation and appropriation of unpaid work, the laws are discovered concerning the movement of capital in general, pertinent to the accumulation, concentration and centralization of capital, summarized in the law of capitalist accumulation.” (2014:161)

In reality, the operation that enables money to become capital is to exchange it for the capacity of labor in action, i.e., for the random purchase of labor power, the only commodity that creates value as abstract human labor. Marx considered that it is only through the exchange of money for the labor power of another the transformation of money into capital can occur as a social relation of production.

Before this, money is potential capital and, therefore, has the capacity to become transformed into real capital, or rather, into industrial capital, as an advanced form in relation to mercantile capital. In Marx's view the use value for which money, potential capital, may be exchanged can only be that from which the exchange value itself arises,

from which it is produced and increased. This may only concern labor. Exchange value can only be realized as such, confronting social use value –not just any use value that relates to itself– that is to say, wage labor power.

The historical stage of the development of commercial economic production itself, of which the free worker is the product, insofar as he loses ownership of his means of production and is left with only his labor power, is the precondition for the birth and existence of capital as a social relation of capitalist production because it is based on the subordination of work to capital.

In these terms, the circulation of goods is the starting point of capital. The production of goods and trade – a developed form of the circulation of goods – constitutes the historical conditions that give rise to capital. Initially, it is in the form of money that capital confronts real estate property, as cash fortune, mercantile capital, interest or loan. For Marx (1889:123): *“The modern history of capital dates from the creation in the 16th century of a world-embracing commerce and a world-embracing market.”*

All new capital, at its inception, appears in the commodity, labor or monetary markets, in the form of money which, through certain processes, has to be transformed into capital. Money that is just money is distinguished from money that is capital in the form of circulation. Thus, in the form of commodity circulation, C–M–C, the same piece of currency changes places twice: C–M and M–C.

Under these conditions, the seller of the goods receives the money from the buyer and now, as buyer, passes the money to another seller. The opposite occurs with the form, M–C–M, since it is not the piece of money that changes place twice, M–C and C–M, but rather the commodity, and it is the double change of place of the same commodity that causes the money to return to its starting point.

In the commodity circuit, C–M–C, the money received in exchange for the sale of the commodity is spent just once on the purchase of another different commodity, in such a way that the circuit begins with a commodity and ends with a commodity, M–M. In the inverse form, which is the money circuit, M–C–M, the possessor of money begins by purchasing the commodity from the seller, M–C, and after possessing the commodity, sells it to another buyer, which implies that the buyer spends money to make money as a salesman. The result of the entire process is the exchange of money for money, M–M.

However, a given sum of money may only be distinguished from another sum of money by its quantity. The circuit M–C–M, therefore, does not owe its content to any qualitative difference between its extremes, M–M, as both are money. Thus, only the amount of money between the ends of the circuit makes a difference. If at the end of the process more money is removed from circulation than was released at the beginning, then the result is no longer C–C', but M–M'.

However, if the final result from a quantitative viewpoint is $M' > M$; from a qualitative viewpoint M and M' is all money. According to Marx, *“The circulation of money as capital is, (...), an end in itself, for the expansion of value takes place only within this constantly renewed movement”*. (1889:129)

As a conscious representative of this movement of capital, which is valorized, as the addition of more money at the end of what entered at the beginning of the valorization process, the possessor of the money that produces more money becomes a capitalist. In the historical stage of the dominance of mercantile capital, the logic was to buy cheaply to

sell more expensively.

However, the logic of industrial capital is also that of the money that buys the means of production and labor power which, like productive commodities used in the capitalist production process, produces more commodities, and when sold are converted into more money. In interest-bearing capital, finally, the M–C–M' circulation is evident, as a complete formulation of the money circuit, which is transformed into capital, but without the intermediate stage involving the commodity. This may be represented by M– M'.

Thus, M–C–M' becomes the “general formulation of capital”, as determined by Marx (1889:133). As profit is the driving force of the capitalist mode of production, it can only exist and reproduce itself on an expanded scale, since the search for profit is interminable. In fact, the capitalist's Profit (P) comes from processes carried out in the sphere of production (increased in value), crystallized in more Commodities (C), and, consequently, realized when the capitalist obtains capital (M'), and this economic surplus appropriated by the capitalist is commonly called surplus value (m).

Capital, according to Marx (1977), is an accumulation of value that acts to create and accumulate more value produced by work. This accumulation may take the form of money, commodity or means of production, or even the agglutination of all three. All of this is to ensure the subsequent accumulation that Marx called self-expansion of value. For Carvalho et al.:

*“Whenever part of the surplus value obtained and realized is not intended for the personal consumption of the capitalist and is invested in the acquisition of additional means of production and labor power, i.e., invested as additional capital (more means of production and labor power) in a continuous circuit, there is **capital accumulation** and reproduction on an expanded scale.”* (2014:179, emphasis added)

On this point, Marx is emphatic and affirmed that:

“Every individual capital is a larger or smaller concentration of means of production, with a corresponding command over a larger or smaller labour-army. Every accumulation becomes the means of new accumulation. With the increasing mass of wealth which functions as capital, accumulation increases the concentration of that wealth in the hands of individual capitalists, and thereby widens the basis of production on a large scale and of the specific methods of capitalist production. The growth of social capital is effected by the growth of many individual capitals. All other circumstances remaining the same, individual capitals, and with them the concentration of the means of production, increase in such proportion as they form aliquot parts of the total social capital. At the same time portions of the original capitals disengage themselves and function as new independent capitals.” (1889:639)

Capitalist production methods aimed at increasing labor productivity are, in short, methods to increase the production of surplus value which, in essence, is the obligatory factor of the process known as capital accumulation. From the viewpoint of Marx

“(…) all methods for raising the social productive power of labour that are developed on this basis, are at the same time methods for the increased production of surplus-value or surplus-product, which in its turn is the formative element of accumulation. They are, therefore, at the same time methods of the production of

capital by capital, or methods of its accelerated **accumulation**. The continual re-transformation of surplus-value into capital now appears in the shape of the increasing magnitude of the capital that enters into the process of production. This in turn is the basis of an extended scale of production, of the methods for raising the productive power of labour that accompany it, and of accelerated production of surplus-value. If, therefore, a certain degree of **accumulation of capital** appears as a condition of the specifically capitalist mode of production, the latter causes conversely an accelerated accumulation of capital." (1889:638-639, apud Carvalho et al., 2014:176, emphasis added):

For Carvalho:

*"Capital accumulation results from the process of transforming surplus value into profit, part of which is used to purchase more means of production (constant capital) and more labor (variable capital). The relationship that exists between constant capital (fixed capital plus circulating capital) in terms of value, provided it corresponds to the same relationship in physical terms (technical composition), Marx calls the organic composition of capital, and is important for the **capital accumulation** process as well as for the rate of surplus value."* (2013:17, emphasis added)

In these terms, as Carvalho (2013:17) explains: *"The expansion and continuous transformation of surplus value into more capital is the basis of capital production on an expanded scale"*. In the next item, the category "work" and the role of the "worker" will be briefly characterized within the logic of capital on the frontier.

Moving on, in the work: *Ciclo e Crise: o movimento recente da industrialização brasileira* [Cycle and Crisis: the recent movement of Brazilian industrialization], Maria da Conceição Tavares ([1978], 1998) explains that in the capitalist system there are three orbits, which should be understood and analyzed. They are: 1) the production of goods, represented by the appropriation of abstract labor by capital, produces the generation of surplus value/average rate of profit; 2) the circulation of goods, where the effective transformation of production prices occurs, that is to say, the realization of surplus value/average rate of profit; and 3) the circulation of money, in which the metamorphosis of capital into commodity-money takes place, the final and most apparent form of profit and capital/effective rate of profit. In the words of Conceição Tavares:

"The orbits are only "separated" to be "remade", in order to understand that profit and capital are global phenomena that may not occur without either one of them. In a deeper sense, the "orbit" of capital circulation contains everyone in the global movement of capital and therefore destroys them all when it destroys itself in crisis. The "separation" of the orbits is therefore equivalent to the movement of abstraction, which, later (as a logical movement), enables the concrete articulation to be taken, without which the profit would be unintelligible. Profit is inherent to the complete capitalist production process, and as such it cannot be "deducted" from "surplus value" or "surplus", nor accounted for by the number of hours of "surplus work". Both surplus (in commodities) and surplus work, i.e., the number of hours worked in excess of those required for the necessary consumption of workers, exist in any society that is not "primitive". (...) Without expanded reproduction of capital there is no profit in the capitalist sense, in the sense of the process of continuous valorization of capital. The construction

of simple reproduction schemes is just a logical exercise, to demonstrate the distribution “in value” of production and capital.” ([1978], 1998:55)

In these terms, profit and capital are contradictory units. This signifies that capital is the contradiction in process. If production prices, in a simple mercantile economy, are a reliable basis for expressing the quantities of work contained in goods, the result of this, in practical terms, is the precariousness of this basis, i.e., the labor-value measure –base, origin and possibility of the process of capital appreciation– with the evolution of productive forces, is denied, which translates into a decrease in variable capital compared to fixed capital. Thus, technological advances enable unrestricted autonomy for capital in its valorization process, placing capital itself as a new basis and limit.

The following section discusses the role of work and workers on the frontiers.

The historically imposing nature of capital in the context of work and workers on the frontiers of the Brazilian Amazon and the Venezuelan Amazon

The Venezuelan Amazon is a region located in the south of Venezuela and plays a significant role in regulating the regional climate, in addition to serving as a carbon sink, helping to mitigate the impacts of climate change. In the words of Barros:

(...) the Brazilian-Venezuelan space enclosed by the Amazon basin and the Orinoco basin, herein called the Amazon-Orinoco axis, is highlighted by the quantity and quality of resources it brings together: biodiversity, minerals, hydrographic basins (waters and waterways), energy potential from different sources (hydroelectric, gas and oil), sustainable arable land, among others. (2011:34)

The Brazilian Amazon, in turn, contains the largest and most diverse reserve of natural resources on planet Earth, represented by its imposing humid tropical forest, its immense hydro-energy potential of fresh water; huge, diverse mineral potential, its genetic biodiversity in terms of fauna and flora and, consequently, its countless aquatic ecosystems. Freitas sought to highlight these elements when she stated that:

“The Amazon is a forest rich in a variety of animal, vegetable, mineral and water species, and is made up of the Legal Amazon, which covers areas belonging to Brazil, i.e., the States of Pará, Amapá, Amazonas, Acre, Rondônia, Roraima, Tocantins, in addition to part of Mato Grosso and Maranhão and the Pan-Amazon, which includes Brazil and its bordering countries, i.e., Bolivia, Colombia, Guyana, French Guiana, Peru, Suriname and Venezuela.” (2010:2)

This vast concentration of multiple natural resources makes the Brazilian Amazon, particularly the extensive territory of the state of Pará, an oasis for those who wish to enjoy a job opportunity and a “piece” of land to call “their own”. Miranda (2011) observed that in the 1960s great incentive was given to exploit the forest in the Brazilian Amazon, as part of the development project of the then military dictatorship.

For Batista and Miranda:

“In the development plans of the Legal Amazon, considered a resource frontier, river waters were fundamental from the perspective of water subsumption, as a

driving force for industrial operations linked to large mining projects, industrial hubs and cities.” (2019:120)

In general terms, frontier regions, both in Brazil and Venezuela, have normally attracted the labor necessary for their agricultural activities, selecting this workforce from other regions of the country. For Barros:

The potential for water transport on the Orinoco, the agricultural and industrial potential of its southern region and the energy resources and associated projects involving the Orinoco oil belt, the largest oil reserve in the Americas, support Venezuela’s interest in the development and security of this region. Socioeconomic asymmetries and economic potential demonstrate the need for occupation, development and integration of the Amazon – Orinoco axis. Planning the location of production and the infrastructure projects gains particular relevance in this region and public policies – national and regional – to induce development in the North of Brazil and the South of Venezuela prove to be fundamental. (2011:34)

The historical process of integrating production on the Amazon’s economic frontier into the national market not only depended on the capacity to manage its productive activities, but also on the necessary institutional framework to attract productive investments and human resources to carry out work in the region. Weinstein provides us with an important stimulus for conducting studies on this subject when she observed:

“(…), I think there is no place in the world where transnational history is more necessary than in the Amazon. It is really difficult to state that the projects of historians on one side or another of the frontiers are able to dialogue. Not that they are exactly the same, but they have similar interests. It is almost impossible to speak of the Amazon only as Brazil, only as Colombia, [Venezuela] or only as Peru. So, this is something evident to me, since we must think of the Amazon as a transnational region.” (2017:175)

Weinstein goes on to add that:

“(..) while I was working with an Amazon that was not necessarily reduced to the frontiers of Brazil, I thought it was important to understand that the Amazon should also be included in the nation’s history, that is to say, the national aspect could not be seen as irrelevant within this framework.” (2017:175)

In the capitalist mode of production, however, the social functions of production and distribution, the extraction and appropriation of surpluses, and the application of social labor are, in a sense, privatized and obtained through non-authoritarian and non-political means. Therefore, the worker is “free”, as he is not in a relationship of dependence or servitude, however capitalism represents the ultimate privatization of political power and, at the same time, is a system characterized by the differentiation between the economic and the political.

Only in Marx (1978) was the stigma of “non-productive work”, referring to labor, questioned, although not because it was considered fundamental to the construction of humanity and the social being, but because it had value and was productive. Thus, capital involves relationships of historical essence, many resulting from the actions of men who exert pressure and constraints on them and cause effects and consequences that are independent of their will, but, are equally alterable and altered by the collective, organized will of the social classes.

It is necessary to understand that bourgeois society is based on individuals, and these – as citizens – express themselves before the State, since ultimately, it is the man who, before the State (within the community), thinks or should think about the universal. That is to say, “should”, because even if it is considered that the space of politics and the State is the space of the public, of the universal, “the free development of all”, “*The political power, properly so called, is merely the organised power of one class for oppressing another*”, said Marx and Engels (2004:27).

In fact, even though the State relates to citizens on an equal basis, it is still an organ of class domination, which exists in the reality of civil society and which is a product of the social relations of production. With the modern State, the relationship between public and private takes on new aspects, which affects gender relations and, fundamentally, work and workers.

In the capitalist mode of production, when the waged worker becomes a commodity, the cheaper his labor power becomes, the more commodities he produces. Even when the world of useful “things” is valued, i.e., of commodities, the labor power is devalued, as a direct result, of the world of men and women who work under a regime of exploitation and are transformed into commodities for the owner of the capital.

Indeed, the worker not only produces commodities, but also produces himself as a commodity; work is alienated in relation to the product of the worker himself, who ultimately gives up what he produced to the owner of the means of production: the capitalist. The product of human work is work molded through an object created by the worker, but which is then positioned outside himself, as an external object.

Therefore, the product of human work is the objectification of work itself and the realization of work is its objectification. The realization of objectified work manifests itself in the capitalist economy as a deprivation of the worker’s reality, the objectification of production as the loss and enslavement of the object, appropriation as alienation.

All these consequences of the alienation of the worker are determined by the simple fact that the worker is related to the product of his labor and as an alien object, which he really is when positioned as a waged worker exploited by the buyer of his labor power: the capitalist.

The alienation of the worker from his product not only signifies that his work has been transformed into an object, in its external existence, but that this existence is outside himself, independent of himself, alien to himself. It represents a proper, substantive power confronting himself, and the destination that the worker has given to the object he produced confronts him as something strange and hostile.

This logic of capital accumulation, which entered the frontier territories of the “Amazônias” (in the plural), separated man from the land. In other words, nature became a resource to be explored, in addition to bringing with it the primitive accumulation of capital, the deterritorialization process of traditional communities and, above all, conflicts over territories across the lands of the region.

In Brazil, from a historical viewpoint, the expansion of the pioneering agricultural front in the Amazon region, when superimposed onto the progress of the peasant-based expansion front, ultimately created a zone of conflict over land ownership, social violence and of extremely precarious work in the field, which culminated in the so-called primitive accumulation of capital. The process is considered primitive because it took place before

the realization of capital and its corresponding mode of production, the capitalist mode of production. Therefore, for Marx:

*"The process, therefore, that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production; a process that transforms, on the one hand, the social means of subsistence and of production into capital, on the other, the immediate producers into wage-labourers. The so-called **primitive accumulation**, therefore, is nothing else than the historical process of divorcing the producer from the means of production. It appears as primitive, because it forms the pre-historic stage of capital and of the mode of production corresponding with it."* (1889:738, emphasis added)

Thus, the economic frontier plays a significant role, acting as a kind of "escape valve" to reduce tensions, distortions and serious agrarian conflicts in the region, as argued by Carvalho (2012). However, even on this frontier, there is a strong tendency, which has even continued until the present day, toward an increase in the concentration of land in the hands of large landowners, which makes development on this economic frontier extremely complex. According to Herrera:

"The transformation of land based on relations in and through capital is undoubtedly one of the most perverse evils of capitalism, since the moment that land ceases to have its social value and begins to have the value of a commodity, social disruption is particularly marked, resulting in the expropriation of countless families. The land that was once a social asset becomes the main means of capital "flaying" the worker, due to the surplus of labor power, guaranteeing the desired surplus value at a low cost." (2016:142)

Marx, therefore, was right when he said: *"Force is the midwife of every old society pregnant with a new one. It is itself an economic power."* (1889:776). This is important because even though the usual mechanisms of capital accumulation on the frontier, under certain circumstances, may not be specifically capitalist in terms of the methods of formal subsumption or real subsumption of other people's labor, as studied by Marx (1978), the fact is that capital may, if necessary for the accumulation of industrial capital, resort to methods of primitive accumulation.

Primitive accumulation is a constituent element in the relationship of capitalist production and is contained in the concept of capital itself, as argued by Rosdolsky ([1968], 2001). Evidently, capitalist accumulation already presupposes wage labor as a source of surplus value, and this capitalist production, based on the appropriation of surplus value, requires the existence of large amounts of capital and free labor power to sell to industrial capitalists.

This movement arising from the genesis of industrial capitalism has the appearance of a vicious circle from which it is impossible to escape, except by accepting the existence of an original accumulation. Indeed, capitalist accumulation in the form that it is currently known is subsequent to the original accumulation called "primitive accumulation" by Adam Smith and Karl Marx.

For Marx (1889:736): *"This primitive accumulation plays in Political Economy about the same part as original sin in theology. Adam bit the apple, and thereupon sin fell on the human race"*. The most commonly used explanation of the origin of primitive

accumulation is told by the story that occurred in the past. Theological legend tells that, after Adam's original sin with Eve's complicity, man was condemned by God to eat bread with the sweat of his brow. This religious legend explains why there are people who have escaped this biblical commandment.

However, economic legend tells us that, in ancient times, there were two types of people: a hard-working, intelligent elite that, above all, saved money; and another, most of the population, made up of lazy, bungling people who spent more than they had. The hard-working elite accumulated wealth and the idle and spending population was left with nothing to sell other than their own skin. In the smooth, harmonious classical political economy, since Adam Smith, the idyll of the right to private property and labor reigns as the only means of enrichment.

However, the important role played in history by the conquest of overseas lands, enslavement, plundering and the murdering of small rural workers to remove their ownership of land through violence and brutality has been recognized. If this is so, then it is necessary to discover under what historical circumstances the means of production and the means of subsistence, money and land, which in themselves are not capital, are transformed into capital as a social relation of production.

These historical circumstances referred to are presented as follows: two very different types of possessors of different commodities have to confront and come into contact with one another under the following conditions: on the one hand, the capitalist, the owner of money, the means of production and the means of subsistence who is committed to increasing the sum of values he possesses by purchasing other people's labor power from its owner, the worker; and, on the other hand, the free worker, seller of his own labor power, willing to sell it to the capitalist.

Free workers are free in two senses: first, because they are not a direct part of the means of production, as in the case of slaves and servants; and second, because they do not own the means of production, as the autonomous peasant does, and is therefore free and unencumbered by them, leaving only their labor power to sell. Thus, once these two poles of the labor market have been established, the basic historical conditions of capitalist production as a producer of goods are also established. This signifies that the industrial capitalist system presupposes the dissociation between workers and the ownership of their means of production through which they realize work.

When the capitalist social mode of production becomes autonomous and independent, it is no longer limited to maintaining dissociation, but reproduces it on an expanded scale. The development of humanity that creates the capitalist system consists of the violent process that takes away from the worker the ownership of their means of work. This is an historical process that transforms the means of production and subsistence into capital, and converts independent producers into proletarian workers who are transformed into wage workers when they sell their labor power to capitalists, who own the money, the means of production and the means of subsistence.

The so-called original accumulation is only the historical process that dissociates the direct worker from his means of production. Original accumulation is called primitive accumulation not only because it constitutes the prehistory of capital and the capitalist mode of production, but also because of the violent, brutal way in which the transition occurred from the feudal mode of production to the capitalist mode of production.

The economic structure of capitalist society was born from the structural decomposition of the feudal society to the extent that this decomposition released elements

for the formation of a new society: the capitalist society. Thus, in Marx's understanding, this situation takes place as follows:

It is precisely in the specifically capitalist mode of production that the real subsumption of labor to capital – which consists not only of the formal subordination of the labor power, but also of the real subordination of the means of production that go on to belong to, and to be produced and reproduced on a scale expanded by industrial capital. (...) With the real subsumption of labor to capital, a total technological revolution occurs that manifests itself in all sectors and activities, including an increase in labor productivity and social changes in the relationship between the capitalist and the worker.” (1978:66)

That said, the frontier must be understood as the “institutional link” between ongoing capitalist development and empty spaces, with a large amount of available land. This soon went on to become economically occupied regions with poor levels of institutional-legal frameworks and domain of the accumulation of mercantile capital.

In political regimes of authoritarian capitalism, such as in the period of the Brazilian civil-military dictatorship, the frontier became a useful resource used by authoritarian governments to reduce social tensions in the countryside and mitigate the rural exodus to large urban centers. In fact, what characterized the penetration of capital in the rural areas was not so much the establishment of social relations of production based on the work of others, but rather the institutionalization of private property.

Indeed, by expropriating land from the mass of rural people on the frontiers, the foundations were laid for the emergence of the capitalist production regime and with it the presence of the waged worker. The proletarianization of part of the rural population created a mass of free workers to sell themselves to capital. It is important to emphasize that the means of production and subsistence, when owned by the immediate direct producer, do not constitute capital. They only become capital when certain necessary conditions occur for them to function as the means of production and the exploitation of wage labor.

The expropriation of land from direct producers, from peasants, while depriving them of their means of production, transforms them into free workers, creating the conditions for the means of production, now owned by capitalists, to become capital. The expropriation of the peasants gives rise to the emergence of a capitalist society polarized into two classes: the capitalists who own the means of production and the proletarianized workers deprived of their means of production.

In the past, the peasant struggle against the economic and political forces that led to the expropriation of their means of production was bloody and resulted in many deaths. To this day, the agrarian issue comes down to the struggle for land in the frontier regions of the Amazon, as is the case of the violent struggle, resulting in the deaths of many rural workers, between squatters (Amazonian peasants) and the region's agrarian oligarchy.

In frontier areas, capital usually articulates expropriation and exploitation at the same time, although in different spaces. Indeed, while on the Amazon frontier the expropriation of squatters (Amazonian peasants) and indigenous peoples still predominates, in urban areas, in general, the exploitation of workers and those who do not strictly fall into any of these categories predominates. In Brazil, in the same way that large farmers have resorted to methods of primitive accumulation, superimposing private power over public power, to kill and expropriate the lands of peasants in the Amazon, so the agrarian bourgeoisie of the

Amazon, which also exploits its employed rural workers, uses these hired rural workers as true slaves to deforest the forest to create pastures for raising beef cattle and pollute rivers with illegal mining.

It is clear, as discussed by Carvalho (1987), that the fundamental condition for capitalism to flourish in a frontier region is the availability of an army of free labor willing to sell itself as labor power to capital. At the base of this historically determined social relationship of production lies the source of the process of capital accumulation: surplus value as part of the worker's unpaid work.

Of course, capital is movement, energized by its contradictions, and for these reasons capitalism is not only history. It has its own history, as a product of transformations carried out from the moment it imposed itself, especially by establishing mechanisms and devices of development that are particularly favorable to it, especially on the frontiers of these two important countries: Brazil and Venezuela.

Final considerations

The economic dynamics of natural resource frontier regions, such as the Brazilian and Venezuelan Amazon, can no longer be dissociated from their role in economic development. Indeed, since the discovery of the Amazon, colonizers have revealed an idealized pattern with regard to the region. It is the immensity and exuberance of the forest biodiversity and the Amazon river basins that have perhaps given rise to extreme attitudes of assigning certain metaphorical and historical names, such as: "Final Frontier", "Garden of Eden", "Lung of the world", "The oil Eldorado", among others.

But what draws attention to these extreme attitudes, and which oscillate between dazzled euphoria and disappointing disbelief, is the cyclical nature of the idealization of the economic and ecological potential contained within the frontiers of the Amazon. Another idealized, although considerably distorted, image of the Amazon refers to the false idea that the Amazon is an empty region in terms of population due to its low density. In truth, not only has the demographic density on the frontiers of the Brazilian and Venezuelan Amazon increased significantly, but there has also currently been a significantly high population increase in the urban centers of both countries.

Furthermore, the recurring image that the Amazon is economically unviable for any development effort has been refuted by recent history. The socioeconomic and environmental contribution that matters to the Amazons, under analysis in this article, involves not only large infrastructure projects, which directly affect employment and income only during the construction phase, but also those socioeconomic projects with high germination power, capable of attracting other enterprises, thereby forming production chains and new industrial complexes, as well as those technologically advanced and with multiplier effects on income and employment in the operational phase. This shows that agricultural, mining and energy projects on the frontiers of these countries are mere enclaves as long as they are not connected to projects in the productive sectors capable of forming production chains that generate accelerating effects and multipliers of employment and income for the people of Brazil and Venezuela.

In this circumstance, the formation of production chains could contribute to the formation of intersectoral and intrasectoral productive ties in the Brazilian and Venezuelan Amazon, in such a way as to facilitate sectoral and spatial interdependence in these regions.

In practice, when natural resources are extracted from a given regional ecosystem so as to be transformed and consumed in another, the exporting region ultimately loses value generated in its physical environment.

These losses eventually slow down the economy of the extractive region, while the communities that are consuming gain value and boost their economies. Given this context, the appropriate model of interaction between the economy of these borders and the global economy must take into account the differences and independence between the two models.

This is so because the development of a peripheral region, from the point of view of capital, is the result of the organization, coordination and use of human and non-human energies, as well as the distribution of productive resources derived and transformed in the region, or traded by resources derived or transformed in other regions. The human use of a regional environment depends on its ecosystem characteristics, which, in turn, are formed in part by the earliest use of natural resources and by deliberate human transformations.

However, the social organization, which can highlight or limit access to and useful and sustainable transformation of natural resources, needs to be delimited and modeled closer to the forms contained in these ecosystems. The differences between the internal dynamics of the extraction model and the production model create a kind of unequal exchange not only in terms of the labor value incorporated in the products, but also in terms of counting the differences and interdependence between these two systems.

This is important because although the usual mechanisms of capital accumulation on the frontier of Brazil and Venezuela may, in certain situations, not be specifically capitalist in terms of the methods of formal subsumption or real subsumption of other people's labor, as studied by Marx (1978), the fact is that capital can, if necessary, resort to methods of primitive accumulation.

The "positive side" of the frontier economy is that it is helping to open up new and interesting investment opportunities in the Amazon. But the course of the frontier advance needs the "rule of law" to regulate the actions of those economic agents who violate, through methods of primitive accumulation, the formally institutionalized rules of the game and to protect the non-formal institutional rules, which endure until the nowadays within native communities (indigenous communities, local riverside communities, maroon communities (also known as quilombolas) and forest peoples), as a result of the cultural pattern inherited through many generations, especially those institutions related to the conservation of natural resources from which they live sustainably and alternative forms of ownership.

With this background, the current fragmentation of the Amazon Forest into a landscape made up of small sections, has contributed to a reduction in its biodiversity through a wide variety of mechanisms, including the practice of deforestation, logging and mining, many of which are conducted illegally and unlawfully and mostly in frontier areas. This occurs because the structure of these societies in frontier territories tends to be "dominated" and "influenced" within the terms that the ideology of capital imposes, including resorting to methods of primitive accumulation.

The advance of the frontier is the result of the movements of people and economic activities that ultimately transform, integrate and expand new social relations on capitalist bases in the occupied space, or in the process of territorial occupation. Evidently, this advance should be viewed within the capitalist cyclical dynamics, but with the crucial difference that the cycle of accumulation and appropriation of surplus may occur simultaneously on

several frontiers.

This both confirms the importance and influence of the frontier in the history of the evolution of a nation's social, political and economic institutions, and also reveals the need to understand the frontier in its most comprehensive format, i.e., as a social relationship of production. Or rather: as an essentially capitalist social relation of production.

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