Land Use in the Amazon from the Mid-Nineteenth Century to 1950

The Transformation of the Amazonian Territory into Capital and its Incorporation into the Global Market

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After gaining independence from the Spanish crown in 1810 and the Portuguese crown in 1822, Latin America was incorporated into the production cycles set by the world powers and their modernization projects, and an increase in resource extraction was registered in the Amazon. The Amazon Basin encompasses the geographical region drained by the Amazon River and its tributaries. The Amazon biome comprises a set of terrestrial and aquatic ecosystems including tropical forests, flood forests, grasslands, savannas, mangroves, and palm forests. Taking advantage of the Amazon ecosystem in the nineteenth century depended on mechanisms that exploited the Indigenous population, considered not only dispensable, but dangerous for these companies aimed at the accumulation of wealth. Considering that the Amazonian territory develops in a symbiotic relationship with its inhabitants, the disappearance of Indigenous peoples has been one of the main impacts of the jungle's transformation into capital.

From the perspective of environmental history, paradoxically, the Amazon's transformation into capital had a marginal effect in the first stage of the Anthropocene. The basic source of energy was wood, and most of the essential materials in the economy were organic. Thus, from the viewpoint of deforestation, the extraction processes of the Amazon until 1930, including rubber exploitation, produced little environmental damage. This extractive nature, which did not develop into plantations, allowed a transformation of the Amazon into capital without significantly altering Amazonian ecosystems until the mid-twentieth century.

This chapter summarizes the extractive cycles through which the Amazonian territory was transformed into capital and the implications stemming from this process in shaping the current context of resource predation defined as the Anthropocene (Crutzen and Stoermer 2000; Rockström 2009). It intends to reflect on the impact of the Amazon rainforest's transformation after rubber exploitation and the Amazon's integration into the global capitalist project from a position of subalter-

nity and dependence. Given the different cultural matrices that characterize these countries, this analysis considers the different actors and the specific characteristics of the territory divided into three blocs: the Andean countries, the Portuguese Amazon (Brazil), and the Guianas.

Nation-State Projects and Evangelization: from "Empty" and Wild Territory to Inexhaustible Source of Resources

The close relationship that Indigenous peoples establish with their environment has endowed much of the Amazon region with an anthropic characteristic, and landscapes conceived as virgin or natural territories are also part of a cultural landscape shaped by the peoples who inhabit it (Descola 1993: 220). Understanding this relationship entails a conception of space that is alien to Western reasoning, which establishes well-defined boundaries in what it considers spaces endowed with civilization and, therefore, culture. Thus, the Amazon rainforest has gradually become a territory of conquest, depopulated in the Western imagination.

During the mid-nineteenth century, when the extractive cycles that opened the way to the Amazon's colonization began – the first being the rubber boom –, Amazonian indigenous peoples still retained a semi-nomadic rationality that allowed them to move freely through the territory, as well as their own conceptions of space, time, and work. This condition led to three phenomena during the deepening of extractivism: the ethnocide of groups that resisted conquest; the acculturation and incorporation into urban dynamics of peoples forcibly inserted into the productive processes of states through mechanisms such as the *enganche* (a form of indebted servitude); and the internment of Indigenous groups in the jungle, later identified as uncontacted or in voluntary isolation.

The population of the countries sharing the Amazon as a whole in the nineteenth century was small, considering the formal size of their territories. For example, the population of Brazil in 1822, the year of independence from Portugal, was about 4 million – with only around 150,000 living in the Amazonian region of the country. By 1900, it had grown to 17 million inhabitants. However, Brazil's figures, like those of other Amazonian countries, did not include the majority of Indigenous peoples. Many Indigenous Amazonian groups had been subjugated over the centuries and forced into a subordinate role within areas where either *mestizos* or European migrants and their descendants ruled. Other Indigenous Amazonian groups isolated themselves in the deep Amazon and remained virtually out of contact with the outside world (Pádua 2017: 24–25).

The nineteenth century was the setting for the formation of state projects and the Amazon's consolidation as border territory. The construction of nation-states in Latin America was wrongly based on the idea of the free and infinite availability

of lands and natural resources. After the decline resulting from the wars for independence and the instability of the political construction of the nation, this imaginary saw the advance of the internal border over the Amazon as the mechanism that would allow the resurgence of various countries.

As an inland territory, the Amazon challenged the competence of states to achieve governance and national integration. As a borderland, it crystallized the geopolitical concern of states for the defense of their borders. As a resource-rich land, the Amazon met the interests of local elites and the needs of world consumption. As a promised land, it attracted economic migrants and adventurers. The expansion of state power, population growth, and the rising demand for raw materials redefined the notions of economic necessity and national security in the Amazon. Industrialization fueled the expansion of cities and mass markets, while new technologies sparked the urban elites' faith in conquering tropical products. Agricultural mechanization and land commodification displaced millions of small rural landowners to the Amazon border. Thus, with the progress of the formation of nation-states in Latin America, the Amazon was incorporated into the national project, promoting systematic mechanisms of internal colonization aimed at the domestication of this space. State agents, along with local and transnational elites, raided the Amazon since the mid-nineteenth century, transforming the borders of the territory into capital.

Before independence, there was no precise knowledge of the Amazonian territory; even during the first two decades after independence, the territorial borders established by the colonizers were respected, since the Amazon did not seem a suitable space for the establishment of cities and productive centers. Among the territorial impacts of the transition from the colonial era to the Republic in New Granada was the political division of its geographical space and, with it, the Amazon (Duque Muñoz 2013). This political division of the Amazon occupied the elites of Ecuador (Núñez Sánchez 2020) and Peru (Mc Evoy 2004). The Latin American nation-state project followed centralist models that excluded the Amazon. The construction of the nation's imaginary in the Andean States was strongly based on the hacienda and plantation system. One of the objectives of the Jesuit reductions had been to generate labor, which was maintained until the republic through exploitative mechanisms such as encomiendas, obrajes, and mitas.

For these countries, the Amazon did not yet appear on the map as a territory capable of being inserted into the dynamics of the nascent world economy and was, therefore, on the margins of progress and modern nation-building. It was not until the refinement of scientific techniques that the Amazonian territory as a whole (ecosystem and inhabitants) was fully integrated into the commercial dynamics starting with rubber extraction in the second half of the nineteenth century. Both because of its Latin American character and because of the notion of a civilizational frontier that retains vis-à-vis those states that have tried to "integrate" the Amazon

into their national projects only as a source of resources, the Amazon is integrated into the global market from the margins. But the Amazon is also a territory of fundamental interest to humanity, because it is here, as in other natural territories, that the limits of human aspirations must be set (Urquijo 2020: 186).

In the case of Brazil, the nation was built on an expansionist logic: the so-called taming of the jungle, mainly in the Atlantic Forest and in some savannas inside the territory (Yory 2006: 42–43). Brazil's expansion over the Amazon in the nineteenth century was much slower. Agricultural production took place mostly on medium-sized properties, with labor from subaltern Indigenous peoples and also the European colonizers themselves. Until the mid-twentieth century, Amazonian cities were created on the banks of rivers in a slow process of occupation, forest extraction, fishing, and small-scale agriculture. With the rise of rubber, some cities were created as part of the expansion of latex extraction.

For their part, Guiana and Suriname, given their geopolitical position and, above all, their status as overseas domains and points of exchange and commercial connection, were integrated into the slave exploitation process with the plantation model that characterized the Caribbean region. The plantation model also marked Brazil and Colombia – although not in the Amazon – thanks to the massive introduction of Black slaves. This labor enabled these countries to participate in various commercial booms, such as sugarcane, cotton, cocoa, and coffee, among others, enriching the landlords who owned plantations. In the Andean case, the state configuration incorporated the native population of the highlands into the processes of productive exploitation with varying degrees of conflict, while the Indigenous Amazonians were considered an "obstacle" to the full use of the territory.

In the case of Peru, between 1855 and 1879, there was an extensive reform process in the regional administrative demarcations as a result of the guano boom. Thus, the Peruvian elites led a series of policies aimed at the territorial reorganization of the eastern slopes that opened up to the Amazon or the Madre de Dios basins. Lima elites feared foreign incursion into the Amazon and the control of the La Paz elites over tropical products, since the latter had dominated markets due to their successful project of eastern colonization (Mc Evoy 2004: 96). The Peruvian elites sought to overcome the national imaginary by means of European migration, surmounting the model of the colonies as in the case of Pozuzo or the Italian settlers in Chanchamayo. These settlements had persisted as self-sustaining islands, far from the expectations of becoming dynamic trade nuclei (Mc Evoy 2004: 103).

The incorporation of the Amazon rainforest was an effort to control forest resources (mainly rubber) and the Indigenous population. Evangelization was considered one of the civilizing elements to convert the Indigenous people into productive labor, which was necessary to exploit the jungle. In 1885, Monsignor De Macedo of the Diocese of Pará gave a lecture in Manaus entitled "The Amazon: Means of Development of its Civilization." The diocese covered the Brazilian Amazon territory,

which included the province of Pará, whose capital is Belém, and the province of Amazonia, whose capital is Manaus. Together, these two provinces covered an area of 3,044,732 square kilometers in Brazil. The civilizing project of the Diocese of Pará shows the role of evangelization in the productive transformation of the Amazon:

> The Amazon, as we know, only lives and thrives thanks to the extractive industry, especially rubber extraction. Europeans are not fit for this semi-barbaric job and if they were, they would not improve at all the current situation in the country, which receives hardly any foreign immigrants except for a few thousand Portuguese. In addition, they usually settle in cities and towns, dedicated exclusively to trade and small industry. The Amazon could, therefore, count on Indigenous labor, especially when slavery has been abolished in one of its provinces and is about to disappear completely in another. If we want to preserve and develop civilization in this region, we have to take care of the Indians, catechize them, make them better, summon them to a normal life. (Costa 1885: 3)

Travelers, Scientific Expeditions, and Chorographic Commissions

The transformation of the Amazon rainforest into capital was part of the phase of capitalism's expansion into a global economy. The center-periphery relationship structured the exploitation processes. In this process, the scientific conquest of the tropics played a fundamental role in making the mechanisms of exploitation behind the "production booms" effective (Martínez-Pinzón 2016).

The nineteenth century was an era of ambitious geographical expeditions in the Americas. Travelers and expeditions launched the scientific conquest of the Amazon beginning in the early nineteenth century. The transfer of exotic plants and the search for wild plants that could be domesticated were both activities that were rationalized, organized, and put at the service of industrial capitalism. From Europe, collectors were sent to the farthest corners of the Earth, looking for unknown species that could serve as raw materials, remedies, or ornaments. While this endeavor was the expression of scientific and state bureaucracies, it was also a search for the rare, the precious, and the dangerous (Dean 1987: 4).

The Amazon played a crucial role in biology since the mid-nineteenth century for aristocrats, diplomats and scientists. Naturalists Alfred Russel Wallace and Henry Walter Bates lived in the Amazon for several years, working as specimen collectors for British museums. They collected specimens of flora and fauna before Darwinism. The findings of Alfred Russel Wallace in the Amazon in the 1840s prompted Charles Darwin to present his theory of evolution at the Royal Geographical Society. Darwin had long conceived the idea of evolution but was afraid to publish it (Alves 2011; Stepan 2001). On the other hand, the U.S. American scientist L. Gibbon,

in September 1851, had gone as far as the Tono and Piñi-Piñi rivers trying to prove that the Purús and the Madre de Dios were the same river; he also noted the importance of the *cascarilla* (cinchona) extraction, the coca production, and the potential of "elastic gum" in this area, even though it presented challenges due to the persistent threat of "wild Indians" (Mc Evoy 2004: 95). Finally, the diplomat Charles Wiener undertook a scientific expedition in the Upper Amazon on October 9, 1880, after being appointed vice-consul of Guayaquil. The expedition resulted in his best-known text, *Amazone et Cordillere* (Judde 2014: 70).

In addition to individual travelers and expeditioners, states funded expensive and ambitious official expeditions to establish the communication possibilities of the Amazon. In its itinerary and its work to establish a Chorography of the Amazonian Province (*Corografía de la Provincia de Amazonas*), the Madeira and Mamoré Railway Studies Commission (*Comisión de Estudios Ferroviarios de Madeira y Mamoré*) crossed the Amazon from Pará to Manaus (Commissão de Estudos da Estrada de Ferro do Madeira e Mamoré 1885). Bernardo da Costa e Silva published his memoirs about the same route in his travelogue from Belém do Pará to Manaus (Silva 1891).

The mid-nineteenth century saw an extensive process of reform in the regional administrative demarcations. A series of steps were taken at that time that succeeded in laying the foundations of national geography. The data provided by geographers and explorers were decisive. Efforts were made to use scientific data to identify the territory and delimit it externally and internally. Thus, the "classical" Amazon in each South American country became a geographical and political division of departments, provinces, and states. The "legal Amazon," as an administrative unit, remained a space of internal dispute in each country until the end of the twentieth century.

Expeditions in the Orinoco and Amazon river basins revealed the process by which local knowledge was incorporated into elite representations of Amazonian populations and territory of the nineteenth century (Codazzi et al. 2000). The Colombian Chorographic Commission, which began in 1850 and lasted almost ten years, was one of the most influential in Latin America. Its objective was to delimit and map the nation and its natural resources with the aim of contributing to its modernization. Those who participated in the Commission and its sponsors believed that a prosperous republic required a unified and homogeneous population. The Commission's reports, maps, sketches, and drawings demonstrate the tension between what geographers observed in their fieldwork, and the homogenization ideas to which they aspired. Their assumptions and methods helped shape a national imaginary. The famous geographer and cartographer Agustín Codazzi considered the Casanare and Caquetá as regions of decline in which economies had stunted, populations had stagnated, and the state had to urgently make a presence in the foothills. Nevertheless, through powerful rivers that interconnect the Andean Nueva Granada with Venezuela, Brazil, Ecuador, and Peru, the Orinoquia and the

Amazon would become future centers of international trade. First, however, these low-lying tropical lands and their inhabitants would have to be transformed. They had to be governed as special territories by the national government, mediated by a prefect. Thus, while the rest of the country became autonomous federal states, the Amazon became a colony (Appelbaum and Pombo 2017: 212–213).

The same need to demarcate the Amazon that the Colombian Chorographic Commission had was echoed in the other Andean nations. In Ecuador, as in Colombia, the Amazon was considered a fledgling province of the Ecuadorian State in the nineteenth century (Esvertit Cobes 2008). In the case of Peru, engineers, rather than geographers, led the Amazonian commissions.

From Military Engineers to Civilian Engineers

To be productive, the Amazon needed to connect to the coastal Andean country and, thus, to the rest of the country and international markets. This would only be possible if the necessary road infrastructure was planned and the existing natural resources were inventoried. Both tasks required the reconnaissance and mapping of the new regions, as well as the introduction of the scientific and technological premises that had enabled the revolution in transportation and communications. Between the 1920s and the 1980s, military engineers became civil engineers. They imagined the Amazon transformed and articulated by new means of communication – railroads, river navigation, telegraph – and placed emphasis on achieving a thriving economy founded on technical-scientific progress and its transformative potential, linked to foreign capitalist markets (Sala i Vila 2006: 441).

Peru, more than any other Andean country, imagined the connection of the coast or the highlands with the Amazon rainforest. Engineers saw the way out of economic stagnation as hand in hand with promoting tropical colonization and direct communication with emerging Atlantic markets by way of Amazonian rivers. Among the official engineering expeditions to the Amazon, the most famous was the Amazon Hydrographic Commission (Comisión Hidrográfica del Amazonas). Civil engineers played a key role in the transformation and articulation of Amazonian projects in Peru, specifically in the jungles of the departments of Ayacucho, Cuzco, Puno, and Madre de Dios in the nineteenth century. Their economic and social imaginaries about the Amazon had an enormous influence on this region's transformation into capital, thanks to its close connection with the state (Sala i Vila 2006: 441).

In Peru, engineers imagined a railway connecting the coast to the hills and punas, then descending to all the headwaters of the Amazon rivers. In 1862, Manuel Pardo, in his work *Estudios sobre la provincia de Jauja*, prioritized the construction of the Lima-Jauja railway. His perception was that the Central Sierra was a strategic point equidistant to the main cities of the Sierra and the main points of penetration

into the jungle. His goal was to reach substantial progress in trade and "civilization," while defending Amazonian colonization with national troops, which would curb Brazil's interference and competence, hidden behind migrations up Amazonian rivers (Mc Evoy 1994: 174–182)).

From the mid-nineteenth century until the Pacific War, Peruvian authorities organized Amazonian explorations composed of specialists from different fields – military, marine, or medical – in order to collect geographic and climatic data, map the regions explored, describe potential natural resources, evaluate ethnic groups to incorporate them into the national economy, and propose the most feasible and convenient road networks. The most renowned Peruvian engineers of this period for their Amazonian explorations were Arturo Wertheman, Juan Guillermo Nystrom, and Herman Göhring. Arturo Wertheman, of German origin, was the engineer of the Amazon Hydrographic Commission (*Comisión Hidrográfica del Amazonas* 1868–73), whose objective was to explore the Amazon and its main tributaries, recognize its navigable course, and map out its overland route to the capital of the country. For his part, Juan Guillermo Nystrom, an engineer of Swedish origin, explored the Cuzco forest by government commission in 1866, running through the Convención and Paucartambo Valleys to the head of the Madre de Dios River. Nystrom also explored the Peruvian Central Forest with the task of demonstrating the feasibility of the Amazon Hydrographic Commission's conclusions to open communication between Lima and the highlands with Iquitos and the Amazon, through the "central road." This road was meant to run through the Pichis River and, from there, to the Ucayali River. Herman Göhring was the engineer of the Madre de Dios River expedition in 1873. The exploration responded to an attempt to incorporate new regions to recover agriculture in the Paucartambo valleys, opening communication from Cuzco to the Madre de Dios region and the Madera-Mamoré (Sala i Vila 2006: 445–446).

In Brazil, one of the last Amazon explorers was the military officer and explorer Cândido Mariano da Silva Rondón, known for his exploration of Mato Grosso and the western Amazon. After leaving the Brazilian army in 1930, he devoted himself to studying Amazonian flora and fauna and to defending the Indigenous peoples who inhabited the rainforest. Rondón headed the Indian Protection Service (*Servicio de Protección al Indio*), created in 1910, and the National Indian Protection Council (*Consejo Nacional de Protección al Indio*), created in 1939. His reputation as a great explorer and defender of Indigenous peoples arose while he was still in the army, taking part in the construction of telegraph lines and other territorial reconnaissance missions. Rondón also dreamed of a system of national parks. In particular, he contributed to the creation of Xingu National Park. His merits led him to receive the rank of marshal, which is the highest Brazilian military grade. The state of Rondonia was named after him, and he was nominated three times for the Nobel Peace Prize (Rohter 2023).

Cinchona, Rubber and the Incorporation of the Amazon into the Global Market

Technological advances made it possible to exploit resources hidden in the Amazon rainforest, particularly rubber, essential for building European modernity until the arrival of oil. Thus, the Amazon was integrated into the discussion of the nation-state model and conflicts over its effective control. From the perspective of environmental history, following Pádua, the transformation of rubber from an "exotic good" into a commodity was only possible in the context of modern capitalism's expansion. Only from the nineteenth century, with the emergence of steamships and railways, did international trade begin to promote an intense flow of materials. In the pre-fossil-fuel world, where ocean shipping imposed severe limitations on the quantity and weight of materials, the transportation of exotic products from the Americas focused on products that had high exchange values in relatively small quantities (such as sugar, gold, timber, etc.) (Pádua 2017: 26).

Before rubber, cinchona was one of the most important tropical products with which local elites sought to conquer the world market. Until its artificial synthesis in 1944, quinine was the main raw material in the manufacture of different drugs to fight malaria. By then, this was not only a disease of the tropics. It had also become a problem in Europe and the United States. What was known commercially as cinchona was the bark of the *Cinchoneae* tree. In the mid-1870s, European manufacturers valued cinchona for its quinine content (Webb 2009).

In the first half of the nineteenth century, the cinchona regions were explored by scientists from botanical expeditions, such as Poepping, Karsten, Delondre, and Weddel, and, around 1800, by Humboldt and Bonpland. The scientific advances of the second half of the nineteenth century were related to the cultivation of cinchona and the way to obtain the maximum yield of quinine sulfate. The highest quality cinchona came from Bolivia, medium quality from Colombia and Ecuador, and low quality from Peru. The haphazard nature of its exploitation influenced relations between entrepreneurs and *cascarilleros* (those who stripped the bark), creating a climate of mutual mistrust. This mistrust, coupled with disputes over the allocation of wastelands (*baldíos*), created conflicts in cinchona exploitation areas, sometimes leading to violent clashes (Ocampo 2013: 224–226). During the development of cinchona plantations in the East in 1880, its exploitation was a typical extractive industry. Due to its characteristically destructive form of exploitation in all South American countries, it was impossible for the same region to guarantee a stable supply. The economic result of cinchona exploitation was the continuous mobility of the extraction frontier, especially during periods of high growth in world consumption (Ocampo 2013: 227).

In the late nineteenth century, the deterritorialization of cinchona trees was decisive for the geopolitics around the plants and their alkaloids until the 1940s. Inde-

pendently, but in parallel, the governments of England and the Netherlands pushed for the smuggling of cinchona seeds from the Andes into tropical regions in Asia. After multiple attempts, the first successful shipments of cinchona were obtained from Ecuador. Thus, the smuggling of cinchona led by the colonial powers, and later by the United States, helped to strengthen imaginaries that the inhabitants of tropical countries were unable to control their production. "It was no longer just about subduing the Indigenous people, but the Creoles and their republics" (Cuvi 2018: 6).

Cinchona and rubber transformed the Amazon into capital. Thus, cinchona and rubber traders and state agents, in many cases represented by religious orders, managed the Amazonian territory as a zone of capital extraction. On the Amazon border between Colombia and Ecuador, cinchona and rubber merchants, as well as religious groups, led the development, success, and failure of state projects during the second half of the nineteenth century. While defending their interests, these actors took part in border disputes with neighboring countries. Through their presence and actions, the three groups supported, in different ways, Colombia's claims to the Amazonian territory (Mongua Calderón 2022).

The rise of rubber in the Amazon has been extensively studied in the history of commodities (Stokes 2000). In 1839, Goodyear found the definitive solution to fix rubber's properties by mixing it with sulfur and subjecting it to high temperatures, a process he called vulcanization. This gave greater resistance to the product than it had in its natural state. Vulcanization laid the foundations for the industrial exploitation of rubber, the ultimate thrust of which would come from Dunlop's invention of the pneumatic wheel in 1888 (Domínguez Ossa and Gómez 1990: 114).

The wild and most abundant tree that produced the purest and most elastic rubber was native to the Amazon basin. Known in the trade as *Pará rubber*, it soon became the object of an immense and complex commercial system that extended from Belém, at the mouth of the river, 3,000 kilometers into the interior of the largest and densest rainforest in the world. In the case of Brazil, the rubber trade became a pillar of its economy, providing at its peak approximately 40 percent of its export earnings, almost equal in importance to coffee (Dean 1987: 4).

Between the late nineteenth and early twentieth centuries, rubber history became the economic history of the Amazon region. In the economic sphere, the rubber boom represented the rise and enrichment of rubber elites, who projected their wealth in the beautification of Amazonian city centers. Manaus, for example, came to be considered one of the most modern cities in the world between 1890 and 1920 for its advanced drainage system, its European-style architecture, and the almost complete distribution of electric power. Abundance became synonymous with the region and was generally accompanied by the obscene enrichment of rubber companies, established mainly in Brazil, Peru, Bolivia, and Colombia. However, the apparent European and American modernity of Amazonian cities did not go beyond a few main streets. The peripheries of Amazonian cities were still made of mud, wood,

and straw without modern sanitation (Dias 1999). The rubber years represent one of the darkest periods in the Amazon since the time of the conquest due to the slavery and genocide of several thousand Indigenous Amazonians forced to collect rubber.

The commercial boom of rubber triggered a fever in explorers, one that promoted a profound phenomenon of internal colonialism, resulting in the region's insertion into a global economic structure framed within a worldwide dynamic determined by resource extraction. Under this dynamic, entire regions became monoproducers. Such was the case with sugarcane in the Caribbean or coffee and cocoa in certain jungle areas. Under this logic, an unprecedented process of occupation and commercial exploitation was undertaken in Amazon territory. Moreover, given the characteristics of the extractive activity involved in an inhospitable area laden with dangers, diseases, and extreme conditions, the rubber companies sought to employ labor from populations considered expendable and exploitable to death.

Countless rubber entrepreneurs were entrenched in the Amazon without necessarily having concessions from the states for rubber extraction. The most prominent export houses of the time were those of Peruvians Julio César Arana, Luis Felipe Morey, and Cecilio Hernández, who operated between Iquitos (Peru) and Manaus (Brazil) – the centers of the rubber economy – the Casa Elías Reyes & Hermanos, installed between the Caquetá and Putumayo rivers of Colombia, and the Casa Suárez in the Bolivian East.

The most powerful was undoubtedly the Arana House, which had rubber plantations stretching from Brazil to Colombia along the Putumayo River. Its lands also touched border areas of Peru and Ecuador. The expansion of this company began in 1903, when Julio César Arana acquired La Chorrera station (Putumayo area) from Colombian businessmen and founded Casa Arana y Hermanos. It should be noted that, at the time, the territory was still disputed between Peru and Colombia, so that Arana had to resort to the Peruvian army to displace other Colombian-origin rubber tappers from the area.

In 1907, Casa Arana became the Peruvian Amazon Company after partnering with an English company. This gave it unprecedented power in the region, which was to be seen not only in the monopolization of the rubber trade – eliminating its competitors even by force – but in the ability to concentrate slave labor through the most heinous and ruthless means. The natives were kidnapped and forced to work, facing punishments such as torture, amputations, or death. To exact these penalties, foremen were brought from the Antilles. During the forty years that this company operated, about 100,000 Indigenous Uitotos, Ocainas, Boras, Bora-mirañes, Muinanes, Nonuyas, and Andokes, among other ethnic groups, were killed. Although this was a reality well known both to the Latin American states involved and to the foreign powers benefiting from rubber, no effort was made to stop it.

Thus, the emergence of rubber on the global stage transformed Peru, Ecuador, Bolivia, and Colombia, particularly in the way these countries constituted their pro-

ductive and territorial management models. For example, in the case of Colombia, rubber production triggered the occupation of Amazonian territories by national and foreign settlers. However, despite the economic distances that the Amazon regions established with the states that administered them, this territory became the scene of a brutal form of capitalism due to the extraction and exploitation of rubber.

In this context, the Andean states assumed the role of facilitators of the region's occupation and exploitation, which was invigorated by the free international navigation of the Amazon River approved by Brazil in 1865. This event facilitated the rubber boom's development and expansion. Due to political weakness and the dismal administration of the governments of the Andean Amazon, the great beneficiary of these territories' abandonment was Brazil, which in 1899 stripped Bolivia of an important region, the Acre (1899 – 1903).

In the case of Colombia, the emergence of rubber houses opened a period of voracious and violent exploitation. This had its apogee with Casa Arana, which operated in both Peru and Colombia in a space that was characterized by porous borders. However, the civil war that Colombia experienced in the early twentieth century favored rubber extraction in Peru, moving part of the bureaucratic administrative apparatus of rubber exploitation to Iquitos.

Countless documents attest to the atrocities committed during the rubber period. The most famous report was by Irishman Roger Casement. In September 1910, he arrived at the Putumayo appointed by the British Foreign Ministry to investigate allegations against the Peruvian Amazon Company, better known as the Arana House, for the mistreatment of Indigenous populations and the terror that it sowed among them (Pineda Camacho 2000; Casement 2011; Steiner et al. 2014). In addition to Roger Casement's report in Putumayo, recent literature has reissued reports of advocates who denounced the crimes in rubber plantations, such as Benjamin Saldaña Rocca (Lagos 2005) (Bernucci and Varela Tafur 2020) or in the case of Ecuador, the Amazonian writer Percy Vílchez (Vílchez Vela 2012).

In Colombia, rubber emerged as a result of the consolidation of large landowner groups, which were favored by state policies such as *Decreto No. 645* (1900), which allowed them to privately exploit land considered to be wastelands. This decree, in turn, favored the advancement of colonization to the Greater Putumayo area, where small towns and colonies began to be established that were part of the entire commercialization network around rubber, promoting the development of a road and river infrastructure that connected the jungle with the rest of the country.

One of the most important rubber houses on the Colombian side was the Casa Elías Reyes y Hermanos, which operated with exclusive privileges. This meant the direct possibility of exploiting indigenous labor, mainly of Witotos, Andoques, and Boras. This exploitation mechanism spread to other companies and individual colonizers that also entered the rubber extraction business under the same dynamics of subjugating the Indigenous.

At the end of the nineteenth century, rubber gained increasing importance, becoming the excuse and reason for the expansion of state borders into Amazonian territories. It grew so important that, in most producing countries, it became one of the three largest export products. The exploitation of the rubber tree provided Brazil with one-tenth of its export earnings in 1890 and even 40 percent in 1910. In Peru, between 1891 and 1910, exports of raw material soared from one to thirty in total value of its exports. And in Bolivia, rubber exports accounted for 19.1 percent of its total domestic exports in 1906 and rose to 22 percent in 1911 (Gamarra Tellez 2018: 146).

In the case of Brazil, cotton, tobacco, indigo, and guarana had been produced in the Amazon region since the late eighteenth century. However, the rubber exploitation that began in the 1850s became a monopolizing force for all productive activity. It hoarded resources for itself and for the economic dynamics derived from it, such as the expansion of urban centers and the vast majority of the labor previously employed in the other productive enterprises (for example, the manufacture of ropes and pottery).

The rubber cycle began in the Brazilian Amazon after a very difficult period, during which the region faced a civil war. On January 7, 1835, the participants of the Cabanagem rebellion took Belém, the capital of the great Pará. At the time, the Cabanagem war cry was one of death to whites and Masons. It was a class and ethnic cry against the colonial and imperial oppression of the Luso-Carioca authorities and the Portuguese and English traders established in the Amazon region. In only five years, the war between the Cabanagem movement and the anti-Cabanagem command claimed the lives of about 30,000 people, equivalent to about one-third of the population by the 1830s, excluding the free indigenous societies that were far from the territory built by colonialism (De Oliveira Ricci 2012: 34).

In Brazil, rubber expansion was of such magnitude that, by the end of the nineteenth century, cities such as Manaus and Belém were a beacon of the Victorian West in the tropics. These cities possessed modern luxuries such as electric lights and a significant presence of motor vehicles and displayed unconscionable luxury and waste. Thus, official historiography has long recognized the "civilizing" role of rubber barons. In Brazil's expansion into other territories, mainly Acre, the *siringalista* (rubber producer) played a fundamental role in its appropriation by pushing for an armed movement against Bolivia's weak and virtually useless regency over this space. Therefore, the territorial occupation of the Acre responded more to an economic than a nationalist discourse, aimed at consolidating the commercial interests of a developing region.

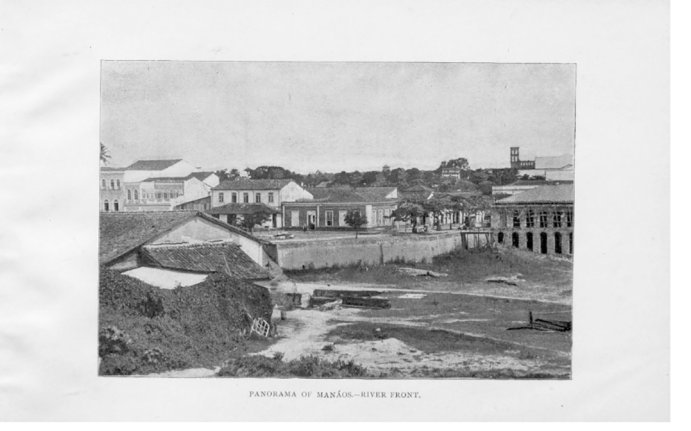
The sectors that were in part modernized with the rubber boom were the media and urban centers, which were needed infrastructurally for the connection between the distant *siringalistas* camps and the nodes exporting raw materials, such as Belém, Iquitos, or Manaus. These urban centers condensed the benefits of rubber exploita-

tion, living between luxury and excess. Cities like Belém, Santarém, and Manaus are still the image of those good years, where one can still see buildings inspired by the French or British style of the early twentieth century covered by the vegetation of the tropics.

Santarém was the third largest city in the Amazon. By the mid-1870s, it was visited every ten days by English company river steamers and almost daily by an assortment of steamships owned by local importers and shippers. In the city, there was even a steamboat built by a Swiss resident, who rented it out. All these boats were able to make the journey to Belém in a few days. In 1869, three-quarters of the city's 6,000 tons of products were shipped by steamships. English steamers departed from Belém almost every week. The arrival to the Amazon, then, was by no means a providential event (Dean 1987: 20).

Manaus was the most important Amazonian city at the World's Columbian Exposition in Chicago in 1893, 400 years after Christopher Columbus arrived in America. It was presented as "The City of Manaus and Rubber Country" (*The City of Manáos and the country of rubber tree* 1893).

Fig. 1: Panorama of Manaus-River Front



Source: The City of Manáos and the Country of Rubber Tree (1893).

In 1890, Manaus was the first city to have electric lights, and at that time, the rubber elites came to imagine the connection of Manaus with Bolivia through the extension of the Madeira-Mamoré railway line. In the future, the railway could facilitate the economic connection between Bolivia and Manaus via the Madeira River. The construction of this railway was one of the agreements in the Treaty of Petrópolis of 1903, which settled the dispute over the Acre between Brazil and Bolivia. However,

the section of the railway that was actually built between 1907 and 1912 was a long way from Manaus (Foot 1988).

Although politicians, aristocrats, and scientists involved in Amazonian rubber extraction attempted to cultivate the plant, such attempts failed for ecological reasons. Rubber cultivation involved many complex problems: the botanical identification of the wild plants from which the rubber was obtained, the collection of information on their growing conditions and how these conditions were used in nature, the organization of expeditions to collect plant material and acclimate it in advantageous locations, and, finally, the implementation of pilot programs to identify optimal cultivation and exploitation techniques (Dean 1987: 4).

Thus, from 1915 the rubber economy in the Amazon declined due to the decreasing price of rubber, which began to be cultivated in Africa and Malaysia under English rule. Environmental historian Warren Dean criticizes the fact that the explanation for the decline of rubber in the Amazon has focused on industrial or geopolitical issues, not environmental ones. Thus, Dean studied ecological relationships that explain why, despite attempts to grow rubber in the Amazon, Brazil was unsuccessful. The *Hevea brasiliensis* is a rainforest tree, thirty to fifty meters high. At first, this tree was exploited along rivers, where it was easy to find as its seeds float. However, taller trees grow on higher ground, and only two or three usable trees are usually found per hectare. As demand for rubber grew and the search for *Hevea brasiliensis* expanded, the tree was found to grow on the right bank of the Amazon within a broad semicircle centered west of Manaus, to the south of Mato Grosso, Acre, in northern Bolivia and eastern Peru. Furthermore, they were located at an altitude of about 800 meters within the portion of the basin experiencing at least 1,800 millimeters of well-distributed rainfall annually (Dean 1987: 12).

Because it was harvested and not cultivated, the exploitation of rubber in the Amazon suffered in different places and times from shortages of manpower, capital, and technology. In Brazil, for example, researchers blamed both domestic and foreign actors for the failure of industry to generate sustained economic development. They claimed that in that country the *seringueiros* resisted the discipline demanded by their work and the increase in plantations, while the local elites wasted the profits. But even when these difficulties were overcome, rubber trees grown in Amazonian alluvial soils were too unproductive to justify their costs. In the Amazon, where rubber is endemic, trees were frequently attacked by a fungus, and attempts to control that fungus were unsuccessful. In parallel, English scientists and smugglers established Amazonian rubber plantations in Malaysia. The harvest of Brazilian rubber collected in the wild could not exceed 40,000 tons per year. This amount became negligible in light of growing industrial applications (Dean 1987: 24).

England had been seeking to control the rubber market for decades. In the 1850s, scientists from the Royal Botanic Gardens in Kew began studying seeds from wild rubber trees. However, it was only until the late 1890s that the first pounds of planta-

tion-grown rubber were put on sale. In this interval, it was necessary to carry out research and experimental programs, many of them inevitably in the wrong direction (Dean 1987: 9). In 1876, Henry Wickham discovered a type of rubber tree that produced the tough and durable rubber that English scientists and businessmen craved. During his journey, he collected 70,000 seeds of this rubber tree. The seeds passed Brazilian customs in Belém do Pará without major inconvenience and were successfully transported to the famous Kew Gardens in London where biologists quickly sent them to the colonial posts of the distant British Empire. The case of Henry Wickham, known in Britain as "the father of the rubber trade" and in Brazil as the "Tormentor of the Amazon," shows the ambition of Victorian England in the Amazon (Jackson, 2008). Finally, other foreign businessmen established plantations in their colonies (e.g. Indonesia), "which undermined the price of rubber for the benefit of industrialists and consumers in rich countries" (Mausacchio 2017: 385).

Thus, from the 1910s, the history of rubber cultivation assumed a global dimension: a large number of Asian peasants were transported to rubber plantations, while many *seringueiros* were released from indebted servitude and returned to subsistence activities or migrated out of the Amazon (Dean 1987: 25). In this account, the Amazonian territory played a fundamental role that undoubtedly makes it one of the leading spaces in shaping the Anthropocene, a period marked by the deepening of extractivism and its consequences for the transformation of the reproductive cycles of the planet's resources.

The natural rubber industry's rise and fall cycle has been considered an example of Latin America's insertion into the global market through the export of raw materials. Political uprisings like the attempted Iquitos revolution in 1921 show the power that rubber cities had at the time of the decline. In Peru, between August 1921 and January 1922, the Department of Loreto was held by a rebel government board chaired by Army Captain Guillermo Cervantes Vásquez, a veteran of the Caquetá campaign in the 1911 Amazon border conflicts with Colombia. The board chaired by Cervantes demanded Loreto's autonomy (Reátegui Bartra 2021).

In the same decade, South American rubber houses decreased their production due to the accelerated disappearance of labor. With the Depression of 1929 and the Colombian-Peruvian War (1932–1933), the first phase of the rubber rush was closed. The massive drop in rubber exports produced a scenario similar to a social cataclysm for the Amazon region. As San Román points out regarding the Andean Amazon, the Amazon rainforest showed the symptoms of a region that had suffered a cataclysm, desolation, and ruin. Many rivers and ravines were left unpopulated or almost unpopulated, as was the case with the Yavarí River. The rubber workers retreated, some to other more habitable rivers or to populated centers like Iquitos, and others, to their places of origin or to other countries. Some Indigenous groups were left in relative peace (San Román 2015: 156–157).

Therefore, the rubber boom represented for the territory and for its actors a period that can be distinguished into two levels. On the one hand, for rubber entrepreneurs, the almost fifty years of bonanza were marked by "adventure" and ambition, the construction of huge fortunes, and the development of urban centers that later became important cities (mainly in Brazil). On the other hand, these were also years of complicity, crime, torture, and terror that led to the destruction of the small towns located on the margins of the Amazon for the sake of the construction of "progress."

It is important to note that rubber extraction in the Amazon region was not so much determined by state borders as by its exploitation mechanisms, which depended on how this resource was distributed in the Amazon basin. Therefore, the rubber barons moved into the territory looking for areas with higher concentrations of the trees from which the gum was extracted, once the resource had been exhausted in already predated spaces.

This process, in turn, prompted the establishment of transport routes necessary for its distribution. Thus, commercial monopolies such as Casa Arana assumed full administration of the territory, abrogating for themselves virtually all productive activities in the region, except the last phase of the commercialization process: the export of rubber to the international market and the import of manufactured goods from abroad. "This activity was always in the hands of large foreign companies, mainly English and American companies such as Norton & Co., based in Belém do Pará, some specialized in exporting rubber and others in importing manufactured goods" (Ulan 2004: 10).

By the twentieth century, much of the Amazonian territory had already been fully integrated into a global logic of production in a condition of subordination. So, with the rubber industry's decline due to the product's expansion to other regions of the world under imperial control, the Amazon continued to insert itself in this logic of production but in a position of lesser importance. Despite this, the establishment of roads and infrastructure made possible the development of towns and small urban centers, as well as the flourishing of other large cities, mainly in Brazilian territory.

The legacy that the rubber boom left in the Amazon territory could be measured at least on three levels. The first would be the opening of roads inside the territory, which strengthened the connection between this region and the state, later leading to the emergence of hotbeds of international conflicts –whether Brazil and Bolivia between 1899 and 1903 or Colombia and Peru in 1932 (Alírio Cardoso 2015; Camacho Arango 2016; Cayo Córdoba 2014; Martinez Riaza 1998). Second, these roads promoted the development of infrastructure that, in turn, gave rise to peripheral towns or urban centers that began to be inhabited by settlers in search of their fortunes.

Third, the rubber activity directly favored the depopulation of the native communities in favor of the entry of the state into the Amazon, which not only authorized

but also promoted the penetration of the rubber companies in the region through the use of their armed forces. The elements of the territory's exploitation and occupation mentioned above are added to this, all of which sowed resentment among the Indigenous peoples towards the states that enabled and promoted slavery and genocide of its inhabitants.

Environmentally, however, the exploitation of rubber generated little damage. Rubber extraction did not require clearing the forest. On the contrary, in order to last for a reasonable time, daily latex extraction required the maintenance not only of rubber trees but also of their environment, which provided them with ecological support. Despite the rapid growth of some cities, such as Manaus and Belém, followed by an equally rapid decline in exports from 1920, the environmental consequences were still diluted (Pádua 2017: 26).

Brazil, as well as the United States, dreamed of developing large rubber plantations in the Amazon. American entrepreneurs and official technicians invested capital and technology in rubber plantations in Brazil for more than twenty years. For Warren Dean, the United States was no better prepared than Brazil to develop the cultivation of Amazonian rubber (1987: 7). Thus, U.S. American entrepreneurs faced the same environmental constraints as local entrepreneurs, but on a broader scale.

An emblematic example of this was the idea of American businessman Henry Ford to colonize the Brazilian jungle, inspired by the conquest of the American West. In the 1930s, Ford decided to emancipate himself from the dependence on rubber production controlled by the British, who extracted the seed of the rubber tree from Brazil to plant in their South Asian colonies. With the idea of setting up his own rubber plantation, the entrepreneur had a city built on the banks of the Tapajós River in the Brazilian Amazon. The village, called Fordlandia, was much more than a plantation, as it attempted to reproduce the urban layout and American way of life, which involved transplanting the U.S. American civilizational ethos into the heart of the Brazilian Amazon. However, this pharaonic project faced a number of technical and practical difficulties, ranging from the presence of Amazonian pests on the plantation to the illness and death of American settlers and the unsuitability of local workers to the dynamics imposed by the foreign businessman, such as the prohibition of alcohol consumption. The project was abandoned, but the ruins of that city were preserved, serving as witness to the failed attempt to tame the territory and its inhabitants. Anecdotal accounts of this insane enterprise have been recorded, embodied in novels such as that of Eduardo Sguiglia, which bears the same name (Grandin 2009).

In the case of Brazil, after the rubber period, the country experienced other forms of extractivism linked, on the one hand, to a second boom in this product and, on the other, to the expansion of agribusiness. Both processes had a direct impact on the Amazonian territory's transformation and the ways of life of its inhabitants. Thus, by the advent of the twentieth century, many Indigenous groups

and communities in Brazil had already been affected by the presence of external actors (church, rubber houses, cattle ranchers, plantations, etc.), while others moved deeper and deeper into the jungle, trying to survive genocide and the destruction of their ways of life and culture.

With the failure of the latter rubber-linked projects, Amazonian cities were abandoned at the same rate as they populated. In the 1940s, after Getulio Vargas took power in Brazil in 1930, a new period of the Amazon's integration was opened in his nationalist project, which had two crucial moments. The first is the period known as the Battle of Rubber (1942), and the other is the creation of the State of Rondonia (1943). In this regard, De Figereido Ribero points out: "The settlement of the area and the signing of agreements with other Amazonian countries for peaceful cooperation were germs of a new perspective for the defense of the region, in the face of rich countries's; ambitions: the Pan-Amazon" (2006: 161). In 1943, the federal territory of Guaporé was created, which in 1956 obtained the name of Rondonia in tribute to the military officer and explorer Cândido Rondón, mentioned in the first part of this text.

The "*Batalha da Borracha*" (rubber battle) prompted a new advance in the Brazilian forest, due to the revival of the rubber industry in the framework of World War II, which affected Asian producers. After fulfilling its objective of supplying rubber to the Allied countries, the region was once again plunged into the slumber that historically determined it as a monoproducer and disjointed space of large capitalist production centers, which in turn allowed the Amazon territory and its Indigenous peoples to reconstitute their own production cycles according to local and national consumption needs. This continued until the arrival of new extractive cycles (timber, livestock, oil, mining) that once again placed the Amazon as a territory of excessive exploitation from which there has been no return.

Geographer Camilo Dominguez (1995) and, more recently, historian Seth Garfield (2013) have recounted the dramatic history of the Brazilian Amazon during World War II. Needy of rubber, the United States spent millions of dollars to revive its trade in the Amazon. In the name of development and national security, the Brazilian authorities launched public programs to transform the interior of the country. Migrants from the drought-stricken Northeast flocked to the Amazon in search of work. In defense of traditional ways of life, the inhabitants of the Amazon attempted to temper outside intervention.

In countries like Colombia or Ecuador, where rubber houses were not as rich as in Brazil and Peru, the rubber companies were followed by a trend of spontaneous colonization in search of land. Over time, the cattle elites of the foothills gradually annexed the jungles opened by the settlers, thus starting livestock exploitation of the Amazon. Melo Rodríguez (2016) has reconstructed Andean migration in the Caqueteño countryside in Colombia. This phenomenon produced the appearance of hamlets and villages as a result of the massive arrival of peasants from Huila, Tolima,

Old Caldas, Antioquia, and Valle del Cauca, some attracted by the colonization led by Maguaré and others by the need for a place to settle with their family. Against this backdrop, El Doncello emerged, a peasant community that since 1929 began to settle on the side of the road that connects Florencia with San Vicente del Caguán (Melo Rodríguez 2016).

Finally, the rubber bonanza fortunately failed to exterminate Indigenous peoples. Recent literature reviews innovation and persistence in several ethnic groups in the Upper Amazon, such as the Western Tucan ethnic group in the Napo River region and tributaries (former Maynas), in the current territories of Ecuador and Peru. Many of these changes and influences occurred shortly after the Conquest (Cipolletti 2017; Henrique 2018).

This situation shows that there are alternative modes of production and reproduction to those that, within the framework of capitalism, establish an accelerated rate of consumption that can be irreversible for the planet (Anthropocene). The survival of peoples such as the Amazonians, as well as human groups that in other latitudes retain a harmonious relationship with the natural environment, is in itself a mechanism of resistance. Added to this, there are affirmative actions such as the coordination of regional Indigenous organizations (for example, those throughout Latin America that are part of the Coordinator of Indigenous Organizations of the Amazon River Basin), which have taken the lead in defending the rights of Indigenous peoples and their territory. It should be mentioned that the Amazonian ethos is a rebellious one, because it resists disappearing. Thus, the peoples who inhabit this region, even if they are not directly related to the capitalist appropriation process, do have to face up to and deal with the consequences of what researchers like Rockström call the Anthropocene, in which all human beings are directly and indirectly involved. In this sense, if this chapter considers that the Amazonian territory, however marginal it may be conceived, has constantly and directly participated in the transformation processes of the last 150 years, then the peoples who inhabit it must be considered as a key player in the search for a solution to the imminent ecological catastrophe that is coming. (Urquijo 2020: 186)

Conclusions

Since the mid-nineteenth century, Latin America has experienced a sustained process of economic growth characterized by a mode of primary export accumulation, whose main resource for several countries (Ecuador, Peru, Brazil, Bolivia, Argentina, Mexico, Venezuela) was rubber, as well as the export of grains and agricultural products (Brazil). In tandem with this process, roads and small urban centers were developed in the Amazonian territory that subtracted several thousand hectares from the Amazon region, which meant the slow but constant assimilation of Indigenous

peoples or the violent disappearance of traditional practices and forms that these communities possessed in the region.

Thus, different local and transnational actors made possible the process of "civilization" from which the Amazon was transformed into capital. For religious missions, the Amazon was a question of converting Indigenous people into productive and faithful individuals; for rubber tappers, loggers, or ranchers, it was a battleground of struggles for sustenance and power; and for scientists and diplomats, it was a space of planning the future and connections to international markets. These visions of the Amazon as part of the tropics used hierarchies of race and nation (Serje 2005).

Paradoxically, the process of transforming the Amazon into capital until 1930 did not generate environmental damage related to modern patterns of population density, landscape changes, and socioeconomic occupation. Thus, in the mid-twentieth century, the map of the Amazon continued to to represent certain areas that were occupied by Indigenous populations and traditional communities, who managed ecosystems in a much lighter way, with a much lower population density, as "voids" of economic life (Pádua 2017: 34).

The primary export model that has characterized the Andean countries caused the colonization of the Amazon to deepen an extractive dynamic, which, along with playing an important role in the inauguration of the "modern world," drove the devastation and genocide within. This process, which took place mainly between the end of the nineteenth and the beginning of the twentieth century, was characterized by little or no effective presence of the state as a guarantor of the right to life of Indigenous peoples.

Along with the problems posed by private initiative and transnational corporations in the Amazon region, as well as by the inconsiderate entry and development of infrastructure in the region, new problems arose in this territory as a result of the disintegration in which these spaces were located, unlike the rest of the nation-state. The colonization processes of the Amazonian territory represented moments of expansion, as well as the reorganization of capitalist projects and the mechanisms by which the state sought to expand into territories that were not formally incorporated within its orbit. Each of these periods has received a response from Indigenous peoples, whose survival constitutes one of the last frontiers facing capitalism in its most voracious phase of extractivism.

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