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## PRODUCTIVE RESTRUTURATIONS IN CORUMBÁ-MS IN THE PANTANAL REGION

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Elvis Christian Ramos a\*

(a) PhD in Geography. Professor at the Federal University of Mato Grosso do Sul, Corumbá (MS), Brazil. **ORCID:** https://orcid.org/0000-0002-6245-6850. **LATTES:** http://lattes.cnpq.br/9124190695156365.

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#### (\*) CORRESPONDING AUTHOR

Address: UFMS. Vila Mamona, CEP: 79304902, Corumbá (MS), Brazil. Tel: (+55 67) 32346801.

E-mail: elvis.ramos@ufms.br

#### Abstract

A fundamental geographical argument is that the irruption of significant economic or technical groupings impacts the rhythm and content of transformations in a preexisting space. These forces affect these spaces and are identified in a temporal perspective of economic cycles. This line of reasoning is undeniable since, in the case of Corumbá-MS, several changes occurred cyclically. Nevertheless, in contrast to a uni-causal explanation and abrupt changes, we defend a socio-spatial perspective based on the idea of coexisting and juxtaposed economic agents and processes, which provoke productive restructuring, whose impact can be sinuous and realign into new functions and ongoing geoeconomic dynamics.

Keywords: Urban Geography, Socio-Spatial Restructuring, Midwest Region, Corumbá-MS.

#### Resumo / Resumen

#### REESTRUTURAÇÕES PRODUTIVAS DE CORUMBÁ-MS NA REGIÃO PANTANEIRA

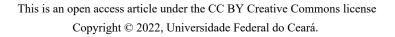
É modelar em geografía o argumento de que a irrupção de agenciamentos econômicos ou técnicos significativos impacta o ritmo e o conteúdo das transformações no espaço preexistente onde essas forças incidem e que isso pode ser identificado numa perspectiva temporal de ciclos econômicos. Não se nega essa linha de raciocínio, pois, no caso de Corumbá-MS várias mudanças se processaram ciclicamente; porém, diferente de uma explicação unicausal e de mudanças abruptas, defendemos uma perspectiva socioespacial baseada na ideia de agentes e processos econômicos coexistentes e justapostos. Estes engendram reestruturações produtivas, cujo impacto pode ser sinuoso, e podem se realinhar em novas funções e dinâmicas geoeconômicas já em curso.

Palavras-chave: Geografia Urbana, Reestruturação Socioespacial, Região Centro-Oeste, Corumbá-MS.

#### REESTRUTURACIONES PRODUCTIVAS DE CORUMBÁ-MS EN LA REGIÓN DEL PANTANAL

Es modelar en geografía el argumento de que la erupción de agencias económicas o técnicas significativas impacta el ritmo y contenido de las transformaciones en el espacio preexistente donde estas fuerzas están involucradas y que esto puede ser identificado en una perspectiva temporal de los ciclos económicos. A esta línea de razonamiento no se niega, porque, en el caso de Corumbá-MS, varios cambios fueron procesados cíclicamente, pero, a diferencia de una explicación unicausal y com cambios abruptos, defendemos una perspectiva socio-espacial basada en la idea de agentes y procesos económicos coexistentes yuxtapuestos. Estos engendran reestructuraciones productivas cuyo impacto puede ser sinuoso, y ellas pueden realinearse en nuevas funciones y dinámicas geoeconómicas ya en marcha.

Palabras-clave: Geografía Urbana, Reestructuración Socioespacial, Región Centro-Oeste de Brasil, Corumbá-MS.



#### INTRODUCTION

This work critiques the trends that simplify the course of developments in economic spaces based on cyclical, radical, and unifactorial syntheses. Associated with these trends is the disregard of the productive processes that coexist temporally and spatially, which often come together to redirect or redefine local or regional development.

It is evident that the perspective of business cycles is exceptionally present in historical, economic, and geographical studies. Indeed, economic changes can be cyclical, alternating between periods of economic decline and progress. In general, this perspective seeks to identify and determine the innovations or decisive factors that may elucidate the course of these fluctuations. However, the economic space can also be a landscape of several parallel production processes that can become co-determinants of economic volatility or play an essential role in mitigating other sectors' crises in the local/regional economy.

Likewise, from a more detailed historical and spatial perspective, structuring changes are not always so radical or abrupt, but they can prove to be more prolonged and, therefore, more sinuous, and even convergent with other processes.

In spatial terms, more processes of sectoral interconnections can be revealed than productive divergences. Although often ignored, secondary or external productive circuits can become the main vectors of the local economy and feedback into decaying sectors, a process that redefines or, more profoundly, restructures the course of local development.

Thus, the main challenge of a socio-spatial analysis is identifying possible agents and spatial processes linked to preexisting systems/circuits that renew the cycle of productive continuities and discontinuities. To uphold this argument, we employ a geohistorical analysis of economic processes to demonstrate how they contributed decisively to the economic restructuring of the municipality of Corumbá-MS and its hinterland when viewed from an anastomosed perspective.

The first part of this work details its supporting theoretical dimension, followed by a discussion of four aspects related to Corumbá-MS: 1) the geoeconomic context; 2) the economic and productive cycles of the area's socio-spatial formation; 3) how certain activities such as river commerce declined due to not one, but multiple internal and external factors; and, 4) new economic restructuring that determined the economic and spatial sustainability of the Pantanal region, despite the reflux of particular economic segments and circuits.

## THE THEORETICAL PERSPECTIVE

In general, discussions about the cyclical development of the capitalist economy stem from economic fluctuations concerning the alternation between two antipodes: a stable/stationary phase and an unstable/discontinuous one.

A corollary of this is that theoretical formulations about mutatis mutandis business cycles depend on historical analysis where time is the paramount dimension. After all, the marches and countermarches of the economy can be demarcated in time, offering a better resolution of the capitalist system's changes in behavior and systemic dynamics. Kondratieff waves show that depression and growth cycles are related to critical moments of the capitalist economy, usually triggered by crucial factors, such as technological revolutions, adaptations of the productive system, moments of economic growth, and subsequently, by moments of retraction of production and consumption, as well as economic recessions.

Schumpeter's (1982) economic cycles are another classic conception in which historical analysis is central, even though it is combined with theoretical and statistical analysis (EKERMAN R.; ZERKOWSKI, R, 1984). The author's ascension cycles stem from autonomous elements, above all, the combination of business factors and some technological innovations that can be disruptive and spread throughout the system. These new front-runners can achieve high profitability rates and redefine market supply and demand. The decline phases are related to the saturation of both supply/demand and competition, leading to decreased profit margins and, finally, stagnation (FREEMAN, 1984).

Another common aspect in business cycle theories is the demarcation of intervals that follow one another or are juxtaposed between the phases of major economic or conjunctural fluctuations. For

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example, in the Schumpeterian perspective, two basic recession/innovation phases correspond to long cycles. Within them, or between one phase and another, there are medium and small cycles such as those postulated by Juglar<sup>1</sup>, characterized by four phases: prosperity, crisis, liquidation, and recession.

Our critique stems from how the modeling of this process only happens in temporal terms, often ignoring various spatial interactions. Despite presenting economic processes as a series of highs and lows, capital's cyclical schemes favor the time factor; their linearity cannot capture the simultaneity of exchanges, and their dynamics are not reflected in the synthesis of these models (LOBATO, 2006).

The empirical nature of waves and economic fluctuations apparent in the short, medium, and long term cannot be denied here. Furthermore, both temporal durations and demarcations are crucial to understanding capital crises. Nevertheless, space and its scales determine how innovations and other factors are disseminated and combined, which under different agents and processes are co-determinants of these productive fluctuations and restructuring.

This study discusses the phases and cycles of changes in the Corumbá area from three essential socio-spatial conceptions: the production of space, productive spatial restructuring, and the scope of spatial synchronicities and simultaneities.

The first concept arises from the idea that places or regions are not merely spaces where objects and structures are located; instead, they are where a particular dynamic social and spatial formation occurs. In this sense, we can speak of spatial production as a social and historical construction process under different agents/agencies, which alter socio-spatial forms, contents, and structures. Consequently, space is dynamic, as it is under constant restructuring, with juxtapositions, and contradictions, in a context where productive, political, and social forces interact (LEFEBVRE, 2013).

The notion of productive spatial restructuring<sup>2</sup> focuses on agents and processes that alter the course of development and modify the preexisting socioeconomic space under new forms of production/innovation and capital accumulation, engendering new local development dynamics. Although they are not entirely detached from past processes or the rugosity where they occur (SANTOS, 2006) or even internal or external assemblages, they can merge or anastomose instead of diverging or causing ruptures in new productive redefinitions in a given economic space.

The third theory emphasizes another temporal dimension of changes in and through space, which is not just a line of temporal succession. Socio-spatial theories or formulations, as in Henri Lefebvre (2013), Milton Santos (2006), and Doreen Massey (2008), have always highlighted the spatialization of time within a framework of synchronicities and simultaneities of agents and processes. They differ significantly from approaches that only view spatial changes in a linear, unicentric, and temporally sequenced perspective, thus encapsulating the various narratives in a single temporality and geographic scale (MASSEY, 2008).

In opposition to this linearity, these authors emphasize that spatial changes are governed not only by a spatial event but by several unequal events or times, some older and others more recent, which are juxtaposed in the territory. Although their dynamics and circuits are initially asynchronous, they can converge and determine the course of socio-spatial development.

Given these three assumptions, it is possible to speak of spatial restructuring as an emerging moment of forces, agents, and economic circuits that coexist and can acquire economic or functional prominence in the face of new geoeconomic conjunctures (internal and/or external factors). These theoretical formulations will be used to shed light on the process of social and economic formation of Corumbá and allow us to develop a multiple geography in terms of unfoldings, agents, and interspatial relationships.

### THE GEOECONOMIC CONTEXT OF THE CORUMBÁ REGION

Located in the geographic center of South America, Corumbá-MS has an important geographic position in the Brazilian territory. It is part of a geopolitical and geoeconomic framework encompassing navigation in the Platine Basin, cross-border exchanges, and trade and interoceanic routes in the Atlantic and Pacific.

In 2020, its population was approximately 112 thousand inhabitants<sup>3</sup>, and the trend is for continuous demographic growth. However, the city experiences constant population interflows along the border. It receives immigrants of different nationalities (Bolivians, Paraguayans, Haitians, Venezuelans, and others), which leads to population fluctuations, and, simultaneously, an element of strong social diversity.

Corumbá's territorial dimensions are truly relevant: the municipality is the 11th largest Brazilian municipality, including 44% of the territory of the Pantanal in Mato Grosso do Sul (ABDON; SILVA, 1998), thus playing an essential role in this biome. The municipality incorporates urban districts, extensive rural areas, riverside populations, quilombo indigenous communities, and mining areas. Its hinterland still incorporates the geographic enclave of the city of Ladário and the neighboring Bolivian cities of Puerto Quijarro and Puerto Suarez.

Due to this relevant economic and institutional geographic structure, Corumbá exerts an urban centrality on the southern Pantanal region and the border with Bolivia. A centrality with an arc of public services, such as universities and hospitals, administrative, legal, military, and private activities. It also concentrates significant traditional commerce in the region. Other aspects that strengthen this centrality are medium and large structural economic activities, such as the port and mineral extraction sectors, articulated with complementary services such as transport companies, workshops, and offices.

The city also has significant intermodality, with connections via the 262 Federal Highway, connecting the Southeast and Center-West in the East-West direction. In addition, the river port, which connects the North and South, transports ores extracted in the municipality along the Paraguay River and part of the grain production from the state's other regions, which take advantage of the river's navigability and the export tax exemption.

Although Corumbá is a peripheral space and a supplier of commodities within the capitalist and global economic scope, this brief geoeconomic and geographic contextualization shows that far from being isolated, the city participates in the effects of south-mato-grossense economic and structural growth and also develops scales of exchanges beyond the center-west.

Let us now address how, despite the rise and fall of some economic sectors, functional and economic restructuring did not determine the interruption of the long-term development of Corumbá-MS.

### THE CYCLE OF RIVER NAVIGATION

Based on a cyclical perspective, a common argument persists that Corumbá's local and regional progress has weakened with the decline of river and port trade, which interrupted a cycle of prosperity, mainly caused by the construction of the Northwest Railroad of Brazil in the 1910s and the connection to the Brazilian Southeast.

This view is remarkably close to the Schumpeterian conception when a cycle of normality is interrupted by the determination of external and innovative factors, with endogenous factors being less decisive. In a geoeconomic sense, the railroad becomes the agent of technological innovation that disorganizes/reorganizes the territorial dynamics.

Instead of talking about deterioration, our analysis considers that external factors and endogenous processes meet as co-determinants of new economic cycles in Corumbá-MS. To understand the validity of this argument, we start with a geohistorical reconstruction of this cyclical process.

The settlement of Corumbá<sup>4</sup> was founded during the Empire in the second half of the eighteenth century: the aim was to consolidate the territorial domain in the extreme center-west to ensure the continuity of gold production in the Cuiabana region and ward off any external threat (QUEIROZ, 2009). Therefore, from the beginning, Corumbá had a crucial geopolitical role as a defensive center and in consolidating the territorial limit with Bolivia and Paraguay.

However, after several negotiations between the Platine countries, the liberation of river trade on the Paraguay River in 1856 significantly determined the course of geoeconomic development in Corumbá and the Mato Grosso region during this period (QUEIROZ, 2009). Corumbá became a river gateway, connecting the distant region of Mato Grosso with cities in the Platine Basin and the Brazilian

#### coast (VALVERDE, 1972; QUEIROZ, 2009).

However, the War of the Triple Alliance against Paraguay (1864-1870) interrupted this nascent trade, which was resumed after the end of the conflict. It was during this resumption of navigation that the urban nucleus of Corumbá began to experience the effects of the extra-regional trade opening. The city became an important commercial center in Mato Grosso's economy and as the connection to the Platine cities.

Corumbá's commercial development was also due to interventions by the imperial government, such as import tax exemptions and investments that increased the city's military contingent and the construction of military structures (QUEIROZ, 2009). These factors also impacted the population, as they increased domestic consumption and commerce in the city. Regardless, a new spatial geometry in the Mato Grosso region took shape as Corumbá established itself as the main river gateway to the Center-West.

Although the physical distance was greater by waterways than by land, this spatial geometry<sup>5</sup> was based on the reduced travel time<sup>6</sup> between the western hinterland and the economic centers of the southeast and south of the country, and with the Platine ports, such as Buenos Aires and Montevideo. Thus, Corumbá became an intermediate urban center between the provincial capital Cuiabá and coastal urban centers in Brazil, the Platine Basin, and Europe.

The main products traded between Cuiabá and Corumbá<sup>7</sup> were imported European manufactured consumer goods not produced in the region and depended on the long and exhaustive land routes through the interior (MAMIGONIAN, 1986, SOUZA, 2008; FREITAS, 2017). Navigation from Corumbá to Cuiabá took place in smaller vessels, which, also using other river connections, arrived at the Miranda and Aquidauana ports. These cities, in turn, extended the trade in manufactured goods via land routes to the Vacaria plains (near Campo Grande) and the Vale do Parnaíba, regions further east of Mato Grosso (QUEIROZ, 2009).

However, it is noteworthy that, in spatial terms, this river trade coexisted with the reactivation of livestock in the Pantanal after the Paraguayan War, including the production and export of jerked beef, broth, and meat extract, although the concentration of land ownership was more intense in the Pantanal (ITO, 2000; CONTE, 2018).

Moreover, the renaissance of livestock in the region also involved foreign capital, mainly traders and ranchers from the Platine region, who, with credit from their countries of origin and support from English capital, could effectively invest in the production of meat extracts, leather, and jerked beef.

The cultivation of yerba mate was another productive circuit that played a key role in the Pantanal and Corumbá areas. Foreign investments had successive impacts on trade with the Platine region. Yerba mate produced in the Pantanal competed with Platine and southern Brazilian production (QUEIROZ, 2009; FREITAS, 2017).

The entry of foreign capital into the Pantanal region went well beyond yerba mate production; it included an increase in the purchases of plots of land in the region, port domination of the river circulation of the Paraguay River, and the growing Argentine and Uruguayan fixation with controlling jerked beef production.

These foreign agencies attracted the concern of the Brazilian Empire regarding its control of the Central-Western territory, precipitating its actions for a reorganization of the geopolitics of the region (QUEIROZ, 2009) to ensure a stronger presence of the Brazilian State in the Platine Basin. There was increased control over shipping and subsidies for mercantile companies, who received a monopoly on shipping. In reality, the Pantanal and Platine economy was under State interference, which is a very relevant factor in the region's economic cycle.

During the river trade period, Corumbá went from being a remote urban center disconnected from the major centers to acquiring regional status, with a web of denser economic connections than formerly. Urban life reflected this change with a relatively cosmopolitan atmosphere thanks to various cultural initiatives, such as the emergence of a local press, sports clubs, and ballrooms enjoyed by the local commercial and rural segment (SOUZA, 2008).

At the beginning of the Republic, the Brazilian State sought more approximations and agreements with Platine countries, such as Bolivia and Paraguay. The arrival of the Northwest Railroad of Brazil at

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the beginning of the twentieth century is part of this geopolitical context, connecting the Southeast to the country's Western region and, later, Bolivia. Eventually, the railroad defined a new spatial geometry in the Midwest, as it enabled Platine countries to access the Atlantic and strengthened the expansion of Southeast Brazil's regional economy, expanding its consumer market and increasing its access to raw materials.

As well as opening a new path to the Brazilian Southeast, which became another gateway to the Center-West, the Northwest Railroad of Brazil also favored the economic development of other urban centers along this axis, such as was the case of the city of Campo Grande.

A key argument is that the Northwest Brazil railroad axis was decisive in Corumbá's commercial and fluvial decline (REYNALDO, 2007; MAMIGONIAN, 1986) since the railroad slowed the ascending rhythm of the municipality's regional growth by displacing the Platine geoeconomic axis to the Brazilian Southeast, blocking Corumbá's urban and regional projection in the Center-West. Thus, there is a "before and after" regarding the railroad in Corumbá's history when identifying a cycle of apogee and decadence.

Counter to this thesis, we argue that, in the case of Corumbá, the city did not decline due to the railroad's arrival. There was a decline in the river import trade, but this was not excessive and was already occurring due to a combination of preexisting endogenous and external factors.

What is at stake here is that the cycle of port import trade experienced by Corumbá was juxtaposed in parallel with other emerging productive processes, like the livestock and yerba mate circuits, which would sustain new economic cycles. Furthermore, these activities were linked to a relatively diversified territorial division of labor (import of goods, export of minerals, beef market).

As will be discussed below, the cycle of commercial port activities on the Paraguay River, in the second half of the nineteenth century, underwent economic and functional redefinitions under the dynamics of other productive segments that gave the city economic and urban sustainability, as happened with the emergence of mineral extractive activities and the consequent refunctioning of the port (figure 1):

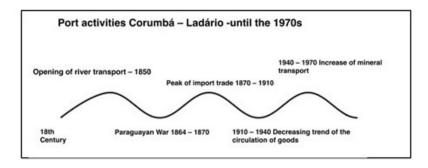


Figure 1 - Port trade of Corumbá and Ladário8 between 1800 - 1970. Source: By the author

## THE PLATINE RIVER TRADE MODEL AND ITS IMPACT ON CORUMBÁ

To state that "the commercial cycle in the port of Corumbá declined" implies from the start that we are referring to a cycle whose arc spanned several decades, and there were several phases within that arc. Corumbá intermediated a circuit of exchanges on a large-scale geographic reach in this vast temporal arc, reaching the Platine Basin and important Brazilian urban centers, such as Rio de Janeiro and Santos (MAMIGONIAN, 1986). However, it was also a development under different continuities and discontinuities, that is, intermediate productive and economic cycles.

The cycle of river trade began in the 1850s, when Corumbá was granted the free transit of national and foreign vessels on the Paraguay River by imperial decree, followed by a halt due to the Paraguayan War and fluctuations that occurred in the twentieth century, until this commercial model ended in the 1940s.

Many conjunctural factors and situations need to be articulated to explain the river navigation trade crisis in Corumbá at the beginning of the twentieth century; the railroad's arrival is not one of these factors.

One factor was the decline in goods imported from Europe and the Platine countries reaching Cuiabá by the river. This fall resulted from various external political and economic situations, such as the First World War, but, above all, during the Great Depression, which significantly reduced the flows of goods and capital in different parts of the world (CORRÊA, 1999; QUEIROZ, 2009).

Aside from these two weighty conjunctures, there were problematic internal factors that, in the case of commercial shipping in Corumbá, were already chronic and predated the 1900s. The most common factors were maintaining the port and river structures. The Brazilian State's maintenance of ports and customs systems was constantly problematic and deficient, which limited its own tax-raising and hampered the river trade's fluidity.

Furthermore, the navigability of the Paraguay River and some of its tributaries suffered interruptions, in general, due to the region's hydroclimatic factors, especially during droughts, as during the extended periods of lower volume of the Pantanal rivers, which delayed or prevented navigation, especially on the Corumbá-Cuiabá axis (REYNALDO, 2007), and involved hugely expensive dredging services.

The long distance between the then capital of Rio de Janeiro and the Corumbá region was another factor since there was a delay in diagnosing problems and making decisions to solve them. Moreover, this enormous geographic extension had few urban centers to favor more sustainable and efficient intermediary logistics.

The tumultuous transition from Empire to Republic was also relevant. The central-west region was marked by bitter local political disputes, which weakened the State's decision-making regarding improving port and navigation structures.

Given the State's difficulty in managing river navigation, a partial solution found by the Brazilian State was to grant concessions to private companies. However, this alternative failed to solve the problems and generate more sustainable, consistent river trade.

An example of this was the granting of subsidies to the Cia. Lloyd Brazileiro, one of the companies holding a concession to transport goods and passengers along the Paraguay River. These grants and/or exemptions were intended to guarantee the service provided and maintain the communication between Corumbá and the Platine and national ports. However, the company was the target of constant complaints from users and local merchants regarding the quality of its services (REYNALDO, 2007).

These complaints included problems with ships grounding and delays in the arrival of goods, which were damaged as a result. Tariffs were high, making goods more expensive and discouraging their commerce. The precariousness of the port and vessels risked passengers' safety, and the latter were often overloaded with cargo.

Ships departing from Europe or Brazil often paid abusive tariffs amounting to forced tolls for Platine ports, making charters more expensive and encouraging smuggling and tax evasion in Brazilian ports (REYNALDO, 2007).

Therefore, it can be inferred that the flow of commercial transactions was preserved, but there were severe, chronic structural problems, both in the port and the watercourse's navigability.

Structural and administrative weaknesses do not mean that the port trade linking Corumbá to Cuiabá was not profitable; on the contrary, it generated a significant mercantile affluence, so much so that, Corumbá had a lively trade with the installation of leading banking houses, hotels, and sophisticated restaurants (SOUZA, 2008).

Nevertheless, this internationalized importing trade (QUEIROZ, 2009) was predominantly in the hands of a few well-capitalized merchants: a mercantile bourgeoisie often composed of foreigners who migrated to the city with significant capital reserves for investment (CORRÊA, 1985; LAMOSO, 2001; XAVIER, 2006; QUEIROZ, 2009). Therefore, a fraction of the commercial class in Corumbá effectively took advantage of this economic affluence. The following section examines how the railroad entered the scene in the economic restructuring of Corumbá and the Mato Grosso region.

## THE ROLE OF THE RAILROAD IN THE ECONOMIC REORGANIZATION OF THE PANTANAL

The Northwest Railroad of Brazil was inaugurated in 1914 and granted the railway connection between the Center-West and the Center-South of Brazil, an axis generating economic and demographic growth between Três Lagoas and Porto Esperança in Mato Grosso's south-west territory<sup>9</sup>.

Indeed, far from limiting Corumbá's growth, the railroad brought as many benefits to Corumbá as the port, as this land route opened up a direct and fluid connection with the Brazilian Southeast, a region that, in that period, was already experiencing strong economic and mercantile growth, especially with the emergence of São Paulo, whose growth was driven by coffee plantations and budding manufacturing.

It is noteworthy that the Brazilian Southeast's differential development has always been linked geographically with the interior of the Center-West. The origins of cities like Cuiabá, Cáceres, and others in Mato Grosso had a geoeconomic orientation with Minas Gerais, Rio de Janeiro, and São Paulo <sup>10</sup>. In other words, prior to commercial navigation activities, there had been a connection with the southeast via parallel land routes to the gateway of Corumbá.

The railroad's arrival at the beginning of the twentieth century only re-articulated the flow of people, goods, and commerce with the Southeast region, with an emphasis on livestock, which, in the case of the Corumbá region, concentrated large herds (SILVESTRE, 2014). Before and during the port phase, the region was already a producer of primary products, such as meat and leather for other regions via cattle roads.

Indeed, the railroad reorganized the existing Pantanal livestock sector, seeking better competitive conditions (CONTE, 2018). Furthermore, this rearrangement of livestock was not radical but a process of marches and countermarches, given that the full rail connection with Corumbá would only occur in 1952.

Therefore, the railroad was essential for the economic and functional restructuring of Corumbá by linking part of the Pantanal's economy to the fastest-growing consumer market in the country. Thus, it can be understood that Corumbá's economic existence shifted between different gravitational centers throughout its history, with the Prata Basin or the Brazilian Southeast in the foreground.

# THE PRODUCTIVE CONTINUITIES AND DISCONTINUITIES OF SPACE IN CORUMBÁ

The following section presents a broader and more congruent panorama of the continuities and discontinuities of the economic cycles in Corumbá, and the Mato Grosso do Sul region.

The first point to consider is that capitalism at the turn of the twentieth century was a spatial production composed of diverse forces and juxtapositions of spatial and economic practices whose interconnections and exchanges had already reached intercontinental scales. This spatial and economic process emerged with industrialization, which intensified the exchange network and began to encompass increasingly broader and more distant spaces (markets) (LEFEBVRE, 2013).

The Platine Basin and the Brazilian Midwest were peripherally incorporated in this process of capitalist expansion originating from the great European centers, both as exporters of raw materials and importers of manufactured goods from these great economic centers.

In this context, it is notable that the Corumbá region did not live solely on the trade of imported goods. During this period, river navigation and land routes exported various products from the wetland, such as beef cattle, salt, poaia<sup>11</sup>, yerba mate, and meat extract to the Platine countries and the Southeast region (QUEIROZ, 2009).

In this context, Corumbá and its Pantanal hinterland have adjusted peripherally since the 1870s. Therefore, it can be said that Corumbá experienced both a local endogenous and a regional exogenous economic dynamism, as the city and the Center-West were inserted in a transnational economic geometry.

The second point is to evaluate what this dimension of changes in Mato Grosso's geoeconomy represented when river trade predominated and of which Corumbá was part. In this regard, authors such as Medrano (1989) and Queiroz (2009) argue that the effect of this period is overestimated, as, in reality, it was a more modest urban, demographic<sup>12</sup>, urban, and economic process than is usually presented.

The commercial period of river navigation did not trigger a shift in Mato Grosso's production chain, nor did it provoke a more robust and competitive insertion with other Brazilian regions between the nineteenth and twentieth centuries. The increased commercial circulation of manufactured products in the region did not significantly impact other economic sectors such as livestock and agriculture.

In practice, the economy was highly dependent on public spending and tax exemptions on imports; although these supported commerce, they did not benefit exports, which were heavily taxed (XAVIER, 2006; QUEIROZ, 2009). Incidentally, onerous taxation on the productive system encouraged the smuggling of goods such as beef jerky, yerba mate, and leather to Platine and Brazilian regions, via land routes and even through the port of Corumbá (XAVIER, 2006).

Another obstacle to the greater strength of the Central West economy was competition with other regions in the country. For example, even though the region developed economic activities that supplied other regions, such as meat and yerba mate, it should be noted that these activities were not exclusive to the Center West: it competed, with less comparative advantages, with other regions, such as cattle from Minas Gerais and yerba mate from the south, which were closer to large consumer markets.

Therefore, when we compare or juxtapose this picture with the scale of the Brazilian economic space at the time, it is evident is that the Mato Grosso and Corumbá regions were spaces undergoing a gradual inter-regional integration. In other words, they were in transition from economic isolation to integration with the Platine and Brazilian economies.

All this was part of the timid and slow process evidenced by Milton Santos (1983) of the articulation of formerly isolated Brazilian economic archipelagos, which were under almost total control of the demands of the foreign market.

Therefore, Corumbá's insertion in the local, regional, and national geoeconomy achieved through river navigation represented and was inserted in a context of modest economic changes when compared, for example, with the Brazilian southeast in this period. Nevertheless, this does not invalidate the argument that the flows of people, goods, and services arising from commercial river activities were not much more significant compared with previous phases.

Furthermore, Corumbá did not have an exclusive productive or commercial dependence in local and regional terms. The development of other productive sectors in the Corumbá and Pantanal region is usually ignored (yerba mate, meat, mining, and fishing). These were juxtaposed, affecting different population strata, and constituting other regional social and productive spaces. This socio-spatial and economic fact is often overlooked, but it was fundamental in offering the city the conditions to continue its growth, even with the commercial river crisis from the twentieth century onwards.

Another aspect favoring Corumbá's constant productive restructuring was its intermodal transport, starting with the port of Corumbá itself, which was linked to Porto Esperança further downstream on the Paraguay River where the Northwest railroad arrived in 1914. This coalition allowed Corumbá to continue distributing goods imported from other countries and continue importing manufactured products from the Southeast region and supplying the vast area of Mato Grosso (QUEIROZ, 2009).

In addition, the commercial port activities that declined during the Great Economic Depression and the Great Wars were refunctioned later, especially in the 1950s and 1960s, with the unloading of Argentinean wheat from destined for mills in Mato Grosso. Additionally, the port started to sell Pantanal beef livestock using cattle ships, which, in turn, were interconnected by rail to slaughterhouses in the Southeast Region (GALEANO, 2006). In the 1980s, Corumbá port, in conjunction with the new 262 Highway, also became an outlet for grain production for the national and international markets.

The inversion of the predominance of an importing to an exporting axis is evident. That is, from a city that intermediated the importation of goods from the European and Platine markets to the north of Mato Grosso, Corumbá became a port city directing the flow of mineral and agricultural production from the region to other markets in an intermodal transport system.

Mining also played an essential role in the later cycles of Corumbá's economy, especially from the

1950s onwards<sup>13</sup>, when it became quite active in iron ore and manganese, with significant financial contributions from public and private companies (HANY, 2005; MATIAS, 2014). However, as Lamoso (2012) has highlighted, mining should be viewed as an activity with its own cycle of expansion and retraction. This dynamic mainly stems from price fluctuations and external demands but directly impacts the local and regional geoeconomy.

In the 1970s, cattle ranching in the Pantanal went into crisis; the causes included more frequent floods in the region (ISQUIERDO, 2010) and competition with cattle in other areas of the Center-West (Campo Grande and Goiás region). However, once again, a previously supporting actor in the local economy entered the scene and became relevant in the local economic restructuring, namely tourism.

Tourism has become a significant economic activity, consolidating itself as a vital sector in Pantanal's economy since the 1980s (LAMOSO, 2012), mitigating the livestock crisis and economic downturn at the time, which affected the city's industrial production and trade (BRITO, 2011). Thus, tourism has become an essential part of the local economy by generating jobs and heating up the economy during other sectors' downturns.

Figure 2 below summarizes the cycles and restructuring of the Corumbá region since the beginning of the twentieth century.

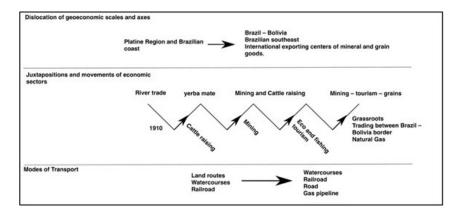


Figure 2 - The geoeconomy of Corumbá in the South Pantanal. Source: By the author.

Currently, Corumbá is a multimodal city, articulating port, road, and rail activities, in addition to the Brazil-Bolivia gas pipeline. However, there are indications of structural and societal changes in Corumbá and region, such as an increase in the urban population and cross-border migratory flows (MANETTA, 2009), the expansion of the urban fabric and increased peripheralization in the city, and the pressing need to improve communication and regional road links between nearby districts and cities <sup>14</sup>.

The effects of these recent spatial and socioeconomic dynamics have expanded dramatically in the Pantanal biome and its biotic and abiotic systems. At the same time, these economic and demographic pressures continue to occur internally and move outwards and are associated with pressures entering this natural geosystem from the outside<sup>15</sup>.

All these aspects need to be analyzed more systematically, as they suggest a more significant economic and functional densification or a new geoeconomic restructuring in progress.

### CONCLUSION

This work sought to develop a less radical and linear socio-spatial analysis, considering the set of social and economic groupings that coexist in space and engender future restructurings. Even so, it does not deny the predominant economic cycles that have prevailed over a prolonged period but coexist in parallel with other ongoing activities.

In the case of Corumbá, it is evident that urban, rural, and port spaces had juxtaposed and parallel dynamics within the scope of their socio-spatial formation, although with different rhythms and

contents. Furthermore, productive and economic changes are not always due to disruptive events, which break entirely with the previous cycle, and are not linked to emerging economic cycles.

As we saw in the case of Corumbá, other economic circuits were being redefined and even reactivated sectors in decline, such as the city's port activities. Therefore, the city continued to sustain demographic, economic, and structural growth even during the crises and discontinuities of its port economic sector.

There has been a decline in economic sectors throughout the history of Corumbá and the Pantanal, but the city's growth has not declined, although this expansion has been dysfunctional, as it has also generated new urban and environmental problems and challenges.

Finally, we posit that geoeconomic studies should not only depend on a sequential and linear analysis of the facts; instead, they should consider how the evidence and/or spatial processes unfold in a geography of simultaneities and coexistences that potentially stimulate new directions and socio-spatial restructuring.

## NOTES

1- Joseph-Clément Juglar was a pioneer in understanding the periodicity of economic fluctuations or waves from statistical data. His work focuses on smaller cycles whose rise and fall compose movements of prosperity, crisis, liquidation, and recession.

2- Although the focus here favors the local/regional scale in Edward Soja's (1993) conception, spatial and productive restructuring are always linked to a higher plane than capitalism's productive changes of and with repercussions in various sectors and landscapes.

3- Information generated by the IBGE on the institutional website: https://www.ibge.gov.br/cidades-e-estados/ms/corumba.html . Accessed on 3/10/2021.

4- First with Forte Coimbra in 1775 and then with the village of Albuquerque in 1778, which would give rise to the district of Corumbá.

5- This term originates with Doreen Massey (2000; 2007) when referring to to economic exchanges whose spatial interactions or power are asymmetric between agents and/or places, in which new paths or paths generate advance/decay of places that lose/gain economic importance. This is a discussion also present in Raffestin in the classic Por uma Geografia do Poder.

6- From six months of travel by land to one or two months by river, based on the distance between Cuiabá and the cities of the southeast coast (SOUZA, 2008).

7- As highlighted by Xavier (2006), there are various goods, such as English cement, Portuguese wine, fine French fabrics, heavy machinery for industry, hardware, furniture, housewares, fabrics, luxury items, fine beverages, salt, crystals, porcelain, and fashion novelties.

8- Ladário is a port city of approximately 23,000 inhabitants that constitutes an enclave in the territory of Corumba.

9- However, there was still no territorial dismemberment between Mato Grosso and Mato Grosso do Sul, which occurred in 1977.

10- A process that originated from the monçoeiro movement, which were expeditions of pioneers to the western hinterland between the eighteenth and nineteenth centuries. These expeditions took place mainly along the rivers and aimed to enslave indigenous people and explore gold mines.

11- A medicinal tuber popular in the European market; one of the first extractive products in the province of Mato Grosso, whose trade stood out from the second half of the nineteenth century onwards.

12- Over a span of four decades (1870s to 1910s) the population rose from 6,000 to approximately 15,000 inhabitants, at the height of the import trade.

13- In the 1910s, mining by the Companhia do Urucum had already begun significantly with Belgian capital.

14- Much of this preliminary information emerged from direct observations and consultation of daily newspapers such as Correio Corumbaense and Diário do Pantanal.



15- As is the case with the advance of soybean cultivation and other large-scale agriculture in areas of the peripantanal (borders of the Pantanal), which result in deforestation and increasing loss of original cover, putting this biome at risk from silting and permanent flooding processes in some areas of the Pantanal plain, impacting on the economic and cultural life of those who live there.

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