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Political geography, geopolitics and territorial management

BRAZILIAN PERSPECTIVES

ORG.

GUTEMBERG DE VILHENA SILVA

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autografia

Macapá, 2023

CATALOGING-IN-PUBLICATION (CIP)
(EDOC BRASIL)

P769 Political geography, geopolitics and territorial management: brazilian perspectives
/ Organizers Gutemberg de Vilhena Silva, Alexandre Bergamin Vieira. – Macapá,
Brazil: Editora da Unifap, Rio de Janeiro, Brazil: Autografia, 2023.

318 p. : 15,5 x 23 cm

Includes bibliography

ISBN 978-65-89517-56-6

1. Geopolitics – Brazil. 2. Political geography. 3. Territorial management. I.
Silva, Gutemberg de Vilhena. II. Vieira, Alexandre Bergamin.

DDC 363.7

Prepared by Maurício Amormino Júnior – CRB6/2422

Political geography, geopolitics and territorial management: Brazilian perspectives

SILVA, Gutemberg de Vilhena (org.)

VIEIRA, Alexandre Bergamin (org.)

ISBN: 978-65-89517-56-6

1st edition, January 2023.

Editora Autografia Edição e Comunicação Ltda.

Rua Mayrink Veiga, 6 – 10º andar, Centro

RIO DE JANEIRO, RJ – CEP: 20090-050

www.autografia.com.br

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ACKNOWLEDGEMENTS

This book is the result of a huge intellectual endeavor by professors who develop research and work in the field of Political Geography and/or Territorial Management. We appreciate all of them. Also, our recognition goes to the Federal University of Amapá (UNIFAP) and the Federal University of Grande Dourados (UFGD), who provided us with the resources for the publication of this book. As for all the other institutions cited in this book, we are also grateful to them for supporting directly or indirectly the research that resulted in the different topics of the book. Last but not least, we would like to thank the students of the Territorial Policies and Development Research Group (POTEDDES), especially those that helped translate and review some of the articles: Brenda Farias de Lima, Gabriel Eudes de Amorim Lima, Bruna Brito Barros, Rosilene de Oliveira Furtado e Manuela Santana Gortz.

PREFACE

If I had to use two words for characterizing this important book *Political geography, geopolitics, and territorial management: Brazilian perspectives*, I think they would be *diversity* and *seduction*. Its division is composed of three sections Geopolitics, Political Geography, and Territorial Management. It not only sustains and mobilizes the eleven chapters of the work but expresses, exactly, the diversity of narratives around the complex relations and actions between politics and territory that comes guiding the agenda of Political Geography in Brazil since the end of the 20th century. This diversity is consistently and intelligently explored by the authors throughout the chapters, and, when traveling through the territories of this book, the reader remains attentive, instigated, and, above all, seduced.

Seduced because the themes portrayed here express the noises that currently echo on the planet and make visible our feeling that the world has *accelerated* (due to the advent of neoliberal globalization and the development of communication, information and transport networks), *slowed down* (as a result of covid 19, which “immobilized” the movement, generated isolation and social distancing, and “emptied” spaces), it accelerated again (attempts to conquer Mars, technological advances such as the new photos of galaxies seen by the space super telescope James Webb, the discovery of gas in the atmosphere of the planet Venus that sparks the discussion of the existence of life on

other planets) *and seems to have never “left the place”*: outbreak of wars, attempted coups d’état, maintenance of socio-spatial inequalities, deforestation, violence, increase in social and territorial injustices.

The counterpoint to this sense of immobility is the real dynamics of Political Geography developed in Brazil in the last 14 years. If before it was just a “project”, today it is a field of study that has been consolidating and attracting the attention of academics and students. Publication of articles and books, preparation of dissertations and theses, and holding national and international scientific events, reveal that diversity is indeed seductive.

It is worth bringing here some information and data that help confirm the diversity of Brazil’s political geography in its recent dynamics and the reasons for its seduction. The basis for this is an article that I have been preparing along with the members of the Dynamic Research Group of Territories – DIT, linked to the Geography course at the Federal University of Bahia/UFBA. The article aims to quantitatively analyze the production of political geography in the last 14 years in Brazil, taking as reference the annals of face-to-face scientific events in that area, held in Brazil since 2009. All *annals* available on the internet were analyzed: I, II and III Brazilian Congress of Political Geography, Geopolitics and Territorial Management – CONGEO; I International Seminar “State, Territory, and Development: contradictions, challenges, and perspectives” – I SETED; III and V National Symposium on Political Geography, Territory and Power – GEOSIM-POSIO. Preliminary results indicate that there are differences in the themes, scales, and institutional origins of the articles.

So far, we have used and analyzed 695 articles that were classified into the eight thematic axes adopted from the III CONGEO, held in 2018 in the city of Niterói/Rio de Janeiro. They are: Axis 1: Political and geopolitical geography: from classic approaches to contemporary renovations, Axis 2: (Geo)politics of the environment, resource management and sustainability, Axis 3: Localisms, nationalisms,

regionalisms and globalisms, Axis 4: Borders and limits on multiple scales, Axis 5: The management scales of territorial public policies, Axis 6: Regional integration and new spaces for cooperation and international conflict, Axis 7: Territory, politics, citizenship and democracy, and Axis 8: Political geography and teaching: thematic, conceptual and methodological innovations. It should be noted that this diversity can hide more specific and cross-cutting themes that are subsumed among the axes. Among these, 5, 2, and 3 were those axes that had the highest number of articles registered in the events, with 21.87%, 14.82%, and 13.23%, respectively. Axes 6 and 8 had the lowest numbers registered, with 6.90% and 6.33%, respectively.

The main scales of analysis used by the authors, national and local, show some conformity with the priority themes listed above (Axis 5: The scales of management of territorial public policies; Axis 2: (Geo) policies of the environment, management of resources and sustainability, Axis 3: Localisms, nationalisms, regionalisms, and globalisms). While 45.18% of the articles portrayed themes on a national scale, 22.88% preferred the local scale. They are two sides of a coin table, the Brazilian federation, with its diversity and permanent tension involving centralizing and decentralizing forces. Joining this “field of forces”, the international and regional scale with 18.27% and 13.52%, respectively.

As for the institutional origin of the articles submitted and approved at the events, diversity also persists and leads to believe that the gradual process of consolidation of Political Geography in Brazil is parallel to a process of nationalization. In the universe of 695 articles contained in the annals, we were able to identify 658 that reveal the regional/state origin of the authors who work in Brazil, and 12 that reveal the foreign origin of some participants in the events (Argentina, Spain, France, Hungary, Peru, Portugal).

Most of the Brazilian articles, 49.70%, come from the Southeast Region, with highlights for the states of Rio de Janeiro, 53.82%, São Paulo, 26.00%, and Minas Gerais with 20.18% of the total amount of

the region. So far, no articles from Espírito Santo have been identified. Then comes the Northeast Region with 22.80%, with 60.00% of these articles originating from the State of Bahia, followed by Maranhão with 8.66%, Paraíba with 7.33%, and Pernambuco with 6.66%. Also, articles from the state of Alagoas were not identified. The third is the South Region, with 12.91%, with highlights for Paraná, responsible for the registration of 47.02% of the articles, and Rio Grande do Sul with 44.70%. The North Region is fourth with 8.21%, highlighting the states of Pará and Amazonas with 35.18% and 29.63%, respectively, by the origin of the articles. The Midwest Region, in turn, is the fifth in participation with 6.38% of the articles sent. The states of Mato Grosso do Sul and Goiás stand out in the region with shipments of 40.48% and 28.57%, respectively.

Putting it all together, Political Geography can be seen not only in Brazil but *from* Brazil, because it is present in all regions of the country and practically in all states of the federation, except for Espírito Santo and Alagoas. Diverse and mostly focused on major national issues, but without losing sight of international issues, this seductive Political Geography also exposes its major theoretical, conceptual, and methodological challenges in the face of the complex relationships and actions between politics and territory that have been taking place. in a world in constant motion.

Therefore, it is a book filled with diversity and seduction, with strengths and challenges, and which not only caters to undergraduate and graduate students in geography, but to all those students and professionals from other areas of knowledge who are curious and interested in debating the major national and global issues of current political geography.

Antonio Angelo Martins da Fonseca

Salvador, January 10, 2023.

PRESENTATION

One of the central challenges in contemporary debates involving Political Geography, Geopolitics and Territory Management is to understand the developments of the territorial strategies of diverse and varied actors that diverge, converge, compete and shape the multiple types of political territories. This requires us to advance in theoretical contributions and analytical studies of the three pillars above that can accompany so much complexity of the social reality.

Politics, as an arena of conflicts and the basis of the pillars mentioned here and which will be addressed in this book, is assimilated as the field of actions emanating from central, regional and local powers in different territories. What we propose in this book is to update the analysis of the view of geography, which not only considers State policies, but also assessments of the most important demands and issues in each territory, using multiple scales and understanding the action of different actors. In this sense, we agree with Martin (2001), when the author points out that valuing the spatial dimension of problems and public action may imply challenges and opportunities for the geographer to stand out as a critical intellectual and more active in the elaboration processes of public policies.

We understand that, without completely abandoning a vision that deals with the State as an unavoidable *actor*, political, geopolitical and management practices must be presented in a plural and heterodox

way due to the ways in which conflicts configure particular and diverse spaces. The (inter)national agenda expands to include political-territorial pacts and conflicts that are often ephemeral, fluid, and processes marked by agencies and interactions that complexify and redefine the spaces of politics and power relations at different scales. We recognize a variety of types of actors and political agents that tension in the arena in which they participate. The topics covered are renewed, as well as the possibilities of posing classical theoretical questions and problems from a new perspective.

In this sense, this book sought to bring together particular perspectives of approaching the relationship between the territory and the political action/practice of different actors, institutionalized or not, and that reveal disputes that are present in contemporary times, whether in Political Geography, Geopolitics or Management Territory. To this end, we have here **eleven chapters**, divided into three sections.

In the opening text of the book, **Multimodal transportation in the Guiana Region: challenges, deadlocks, and regional geopolitics**, *Gutemberg de Vilhena Silva* analyzes the multimodal transportation structure in the Guiana Region. The author identifies and makes his considerations about three major transport and circulation axes: one waterway (the Trans-Guyanese waterway, originally *Trans-hidroguianense*), one roadway (the Trans-Guyanese highway, originally *Trans-rodoguianense*) and a third composed of air routes (with small planes). Geographic conditions and territorial policy options, concludes the author, determined this configuration of multimodal transport, characterized by poorly articulated networks, high circulation costs and long periods for carrying out intra and inter-regional commercial activities.

Next, *Glória Maria Vargas* in **The meaning of Eurasianism(s): geographical and ideological features** evaluates contemporary Russia, pointing out that it is necessary to have a broad understanding of what

is called Eurasianism, since, for the author, most of the basic concepts, strategic geopolitical vision, and ideological convictions find greater basis in the latter, especially when considering Eurasianism as a civilization with a special role to play as a model of integration of different peoples or ethnicities, generating multiple visions in a *Great Geographical Space*. In this sense, the author concludes that Eurasianism defines power not only politically, but also in terms of civilizational geographic values, thus showing a geographical teleology.

Authored by Luis Paulo Silva and Wagner Ribeiro, the text entitled **Transboundary rivers and the Brazil-Bolivia border: water governance and uses in the center of South America**, is a contribution to understanding the complexity of international transboundary water governance between Brazil and Bolivia. The authors evaluate three aspects: the role of rivers as territorial boundaries, the use of shared water resources, and the role of political organizations in transboundary water governance, demonstrating that States have guided water governance in a shared way.

In the text that closes the first section of the book, **The rivers on the border of Brazil**, *Ricardo José Batista Nogueira and Thiago Oliveira* address the rivers on the borders of Brazil from a geopolitical perspective, highlighting how they influenced the process of territorial delimitation of the country. The authors consider that the geopolitical meanings of rivers appear when they cross different national territories or when one has control of their rivers' source or mouth, requiring treaties and agreements for their common use.

In the fifth text of the book, starting section number two, **Why we should talk about municipalities and political geography**, *Iná Elias de Castro and Daniel A. de Azevedo* synthesize and advance the discussion about the municipal scope as a privileged space for society's life and as a privileged instance of public management and political representation, including the place of voting and the strategies to obtain it. The authors start from the assumption that

identifying characteristics and differences in the municipal fabric provides greater knowledge about the links between space, voting and territory management by society.

Reflecting on territorial autonomy as a mechanism underlying the creation of municipalities is the focus of the text **Creation of municipalities and territorial autonomy**, authored by *João Paulo Vieira Batista* and *Adilar Antonio Cigolini*. The authors point out that the Brazilian municipality has always had a certain autonomy, which was expanded with the Federal Constitution of 1988, including a significant growth in the number of emancipations. They verified that, throughout the history of Brazil, the essence of the creation of municipalities is territorial autonomy and that it provides political participation to local residents and, therefore, citizenship, in addition to access to public resources.

The seventh text, **Family farming potential in the context of the bi-oceanic railway in Mato Grosso do Sul, Brazil**, by *Edgar Aparecido da Costa* and *Glenda Helenice da Silva Rodrigues*, discusses the opportunities for new markets and greater competitiveness for specific niches of family farming located immediately close to the Bi-oceanic Route, a road corridor that connects the Atlantic (in Brazil) and Pacific (in Chile) Oceans. The authors analyze the stretch that crosses the state of Mato Grosso do Sul and point out several shortcomings in their productive organization of family farmers and problems in regularizing production for sale, which would require government support to solve these problems.

Camilo Pereira Carneiro, *Matheus Pfrimer* and *Gabriela Kilpp* discuss the role of BNDES as an important tool in conducting Brazilian foreign policy during the Lula and Dilma governments in the text **The role of bndes in Southern Africa: projects in Walvis Bay corridors and Nacala corridor**. The authors analyze the role of BNDES in Brazil's foreign policy on the African continent between 2003 and 2014 and the impacts on local African development, with the support of

BNDES in projects developed in strategic areas of Southern Africa: the Nacala and Walvis Bay corridors.

Concluding the second section, *Marcos Leandro Mondardo* attributes to Political Geography a stimulating and intercultural dialogue with indigenous peoples' territorialities, in the sense of making it collaborative with social struggles for territory. In his text, **Collaborative Political Geography of Indigenous Struggles: conflicts and multi/transteritorialities of r-Existence**, the author uses Political Geography to discuss how the analytical tools and spatial practices of r-Existence can become weapons in the fight for justice and the struggle of the Guarani and Kaiowá for the recognition and land tenure regularization of the *tekoha*.

Then, in section three, *Cláudia Marques Roma*, *Alexandre Bergamin Vieira* and *Raul Borges Guimarães* analyze the regionalization of health in the state of Mato Grosso do Sul, with reference to small towns, because they enable the understanding of different normative logics that regulate the organization and health practices in the territory. In the text **Public Health in Brazil: conflicts and territorial disputes**, the authors seek to understand how the territory participates and is incorporated into the process of regionalization of the Unified Health System (in the original, *Sistema Único de Saúde*, SUS). They show how socially produced territories are incorporated into regionalization and how the differences between agents and territories can express socio-spatial inequalities in access to health services.

Closing the book, the eleventh text, **Geography and environment: state policies in the configuration of sustainabilities in Brazil**, by *Augusto César Pinheiro da Silva*, addresses how the discourse on sustainability has been used in development projects based on nature and the use and appropriation of natural resources and their management. According to the author, environmental management strategies in Brazil have been adapting to the greater or lesser degree of popular participation in public policies and sustainabilities. The

role of federative entities provides the greatest plurality of ideas, based on the ecological and environmental demands of Brazilian society, both in relation to the cultural perspectives of traditional peoples and those related to projects for the modernization of the national economy.

Organizers

SECTION 1

Geopolitics

MULTIMODAL TRANSPORTATION IN THE GUYANA REGION: CHALLENGES, DEADLOCKS, AND REGIONAL GEOPOLITICS¹

Gutemberg de Vilhena Silva

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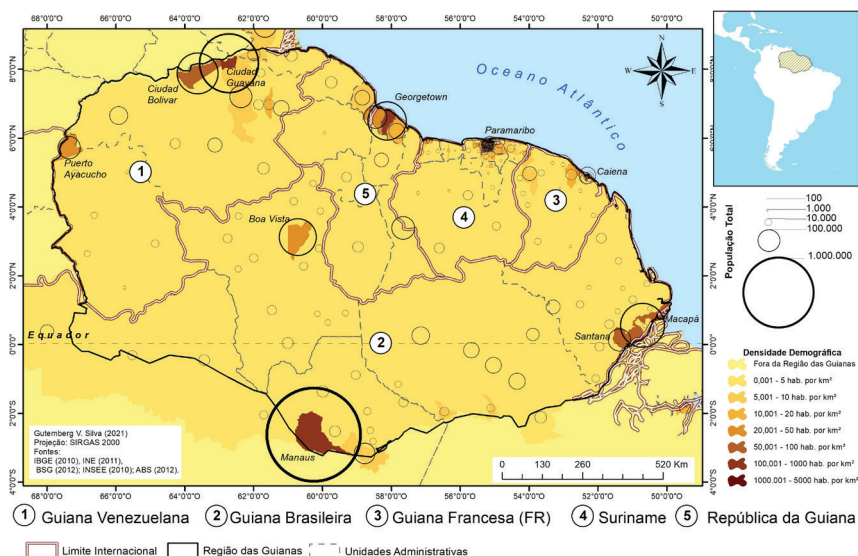
Introduction

Conceived as a geopolitical region for road integration in the 1970s (MEIRA MATTOS, 1980) and constitutive of strategic axes of multimodal interconnection in the Pan-Amazon in the 2000s, the Guyana region has not yet achieved a transportation structure that is minimally adequate for intra and inter-regional circulation, as a result of countless historical factors, including those of a geopolitical nature. The Guianas correspond to a regional complex in the north of South America (LÉZY, 2000) that includes Suriname, French Guiana, the Republic of Guyana, Brazil (the state of Amapá and parts of Pará and Amazonas), and Venezuela (the states of Amazonas and Bolívar and part of Delta Amacuro), with approximately 1.7 million km², in which more than 10 million people live, many of

1. This text was originally published in: SILVA, G.V. O transporte multimodal na região das Guianas: desafios, impasses e geopolítica regional. In: Wanderley Messias da Costa; Tatiana de Souza Leite Garcia. (Org.). América do Sul: geopolítica, arranjos regionais e relações internacionais.. 1ed.São Paulo: Edições FFLCH/ USP, 2022, v. 1, p. 1-424

which are concentrated in capitals or major cities in the edges of the region (Figure 1).

Figure 1: The Guyana region



Source: Own elaboration.

The Guianas are at the northernmost point of South America, with a robust Atlantic coastline, rivers of extreme geopolitical importance (such as the Orinoco and the Amazon) and a quite diversified environmental geography, vegetation, and geomorphology, besides possessing a natural capital of high strategic value today, consequence of a reduced population, low territorial use by large economic enterprises, low levels of deforestation, and the existence of several protected areas, especially in the Venezuelan part and the border zones. Furthermore, it is the most Caribbean South American portion, and its contact with Europe and its structuring projects is direct and frequent due to French Guiana's status as an Overseas Territorial Collectivity of the French Republic, one of the five Guianas, without losing sight of the colonial legacy.

This region has undergone many territorial transformations since its first inhabitants, the indigenous peoples, populated it more than 10,000 years ago. Different ethnolinguistic peoples have created their geographies, established their interaction networks, and promoted their spatial practices based on a type of semi-nomadism, considering the natural conditions (relief, soil, vegetation, hydrography) that imposed restrictions on them and, at the same time, potential for the development of their communities.

With the arrival of European explorers since the end of the fifteenth century, followed by enslaved African groups in the sixteenth and seventeenth centuries, Asians, and peoples from the American continent itself in the nineteenth and twentieth centuries, a long process of occupation, circulation, and construction of territorialities in the Guianas occurred, resulting in a complex region under various socio-territorial aspects. Events in Europe (such as the Great Navigations, the Iberian Union, the slave trade, the bourgeois revolutions, and numerous wars and international treaties related to the conquests) have outlined changes and adaptations - sometimes profound - in the territorial organization of the Guianas over the last five centuries.

In this text, we will analyze the multimodal transport structure of the region. To this end, our main methodological bases were document and bibliographic consultation and fieldwork, the latter carried out in two moments: in 2018 and in 2019/2020². In the first part, the text dedicates analysis to the modes of transport in the Guyana region. It then launches a geopolitical proposition to think about such structure.

2. In the first, we traveled the Trans-Guyanese highway and the Trans-Guyanese waterway leaving Macapá, Amapá (Brazil), for 23 days, between November and December 2018. In the second, we did only the Trans-Guyanese highway for 20 days, between December 2019 and January the following year. In both, we did not manage to do fieldwork in the Venezuelan Guiana, except in the city of Santa Elena de Uairén.

THE MULTIMODAL TRANSPORT STRUCTURE OF THE GUY-ANA REGION

The regional transportation structure is made up of varied river connections, few road routes, some regular intra and inter-regional flights, and an almost non-existent and scrapped railway base. We can divide it into three major axes: (1) in the great arc between the Orinoco and Amazon rivers - and penetrating the forest in all senses, the waterways, with the *Trans-Guyanese waterway* as its nuclear structure -; (2) in the Atlantic coastal strip, where highways predominate, especially the *Trans-Guyanese highway*; and (3) in the great regional interior, where airplanes, generally small planes, and canoes are in charge of implementing the circulation.

The Trans-Guyanese waterway and its inland river connections

The hydrographic network is one of the greatest assets of the Guyana region. Although there are a huge number of rivers, canals, and tributaries, 47 of them of medium to large size are responsible for much of the regional drainage, including the Negro, Orinoco, Essequibo, Trombetas, Maroni, Corentyne, Oiapoque, and the main one, the Amazon River (HAMMOND, 2005; Figure 2).

The rivers of the Guianas function as true water “highways” in the movement of both population and goods, and the extensive waterway network of 1,600 kilometers of navigable rivers (LUJAN; ARMBRUSTER, 2011) is fundamental to several small towns and cities that exist in the region. The core of the region’s hydrographic network is the Trans-Guyanese waterway (*Trans-Hidroguianense*), a name we created to refer to a set of waterways that connects large, medium, and small cities in the Orinoco-Amazon arc and the arc’s constituent branches (Figures 2 and 10).

Figure 3: Medium and small boats at the port of Manaus (Brazil)



Source: Fieldwork (2019, photo by Gabriel Flores).

In this arc, there is a large natural barrier that prevents the direct communication of the Orinoco with the Negro, the fundamental rivers of the region at the height of the Cassiquiare Canal³

3. The Cassiquiare channel is a very rare geographical occurrence at the boundary between the Amazon and Orinoco basins, and unique in its dimensions, which is the fluvial capture of a bifurcation of another watercourse, i.e. of the Negro vis-à-vis the Orinoco.

(Figure 2). The elaboration of an engineering strategy for fluvial interconnection through this canal is fundamental to integrate the Trans-Guyanese waterway. Aristeguieta (2015) clarifies that the main obstacle to this interconnection is constituted by the Atures and Maipures streams, in front of the city of Puerto Ayacucho, and its overcoming, although it is technically feasible, besides its high cost, has environmental repercussions that make its execution difficult.

Despite the historical diplomatic efforts between Brazil and Venezuela, the relative geographic isolation, the low economic dynamics, and the policies of “buffering” the protected areas of the Amazon have been relevant conditioning factors that have made investments in the construction of a canal access between both countries unfeasible until today (BARROS; CÓRDOVA, 2014).

Transport through the Trans-Guyanese waterway is most dynamic between Manaus and Santana. The predominant form of navigation is inland, cabotage, and long course navigation, in which several large, medium and small companies use the waterways to have access to local, national and international trade. On this connection, there is capacity to receive from river ships to ocean-going vessels, which carry out coastal shipping to the seaports of the Northeast, Southeast and South of Brazil, or to overseas ports.

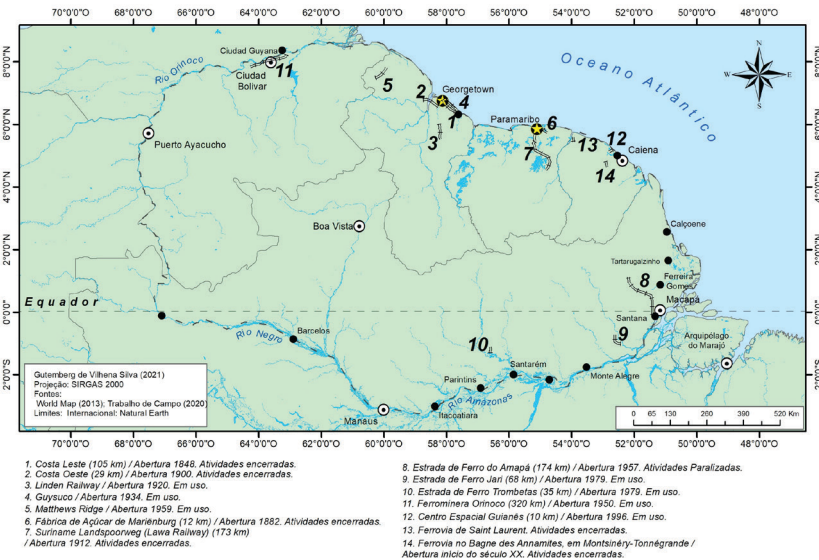
At the regional heartland, some of the most remote areas are only accessible by canoe. The Maroni, Oiapoque, and Approuague Rivers (Figure 2), three of the most important rivers in the regional border-interior connection, can only be crossed by these small boats. In addition, in the everyday space of many riverside communities, rowing canoes allow systematic contact between families and have been the basis of circulation for millennia.

The weak railway network

The use of railroads was one of the first initiatives of human action to connect inland areas with the Atlantic coast, although it is occasional and limited in the Guyana region. In general, the railroads used or those still in operation were used to transport coal, sugar, and - especially - ores (bauxite, iron, and manganese, mainly). The first railroad works built in the Guianas, and even in the entire South America, was the *East Coast Railway* (Demerara-Berbice Railway), in 1848, in what was then British Guiana. After this, other railroads (Figure 4) were opened to connect towns and cities, transport goods and people, and establish connections to international markets.

In all, 14 railroads have been built in the Guyana region, totaling approximately 950 km of track. The greatest effort to establish a regional rail network, although this has never been realized, has been in the Republic of Guyana in a triangle between Georgetown, New Amsterdam and Linden. Even so, the Landspoorweg (Lawa Railway) railroad in Suriname and the Amapá Railroad (EFA) in Brazil were the most extensively used and, moreover, had a key geopolitical role: that of penetrating the dense Amazonforest for mineral extraction. Venezuela, for its part, has only one railroad in operation (Orinoco Railroad) in its Guyanese part, although it has a strategic plan to strengthen its railroad network by 2030, integrating Santa Elena de Uairén, Ciudad Bolívar, Ciudad Guayana, Puerto Ayacucho, and several other cities to the national network.

Figure 4: Railroads in the Guyana region



Source: Own elaboration.

In French Guiana, railroads were not a strategic option for long distances. That is, although France is world-renowned for the development of its railway sector, in its Overseas Territorial Collectivity in South America, rail transport was barely known. For Granger (2021), the argument is that the ground is too mobile, making it too expensive to build and maintain a railway. The Kourou Railway is a highlight in the Guyana region, although it is short (only about 3 km). It carries technological equipment to the space base in the city of Kourou, which is 60 km from the capital, Cayenne.

There has never been a planned, interconnected network in the Guyana region since, and the result has been a disconnected collection of lines of various sizes, many of them on the Atlantic coast. All lines, except those in French Guiana, were dedicated to the traffic of primary products, especially ores (gold, bauxite, iron, and manganese, mainly) and were fundamental for the displacement

of employees and residents of different cities, constituting the first *technical object* created to dynamize regional circulation, even in a restricted and limited way. In addition, however, the railroads played a minor role in the penetration of the regional interior, as they were always very insubstantial, punctual, and of little strategic value for territorial management in the Guyana countries.

The Trans-Guyanese highway and its reduced inland ramifications

The fundamental structure of the Guianas' road network is the Trans-Guyanese highway (*Trans-Rodoguianense*), a denomination we created to refer to a set of land routes that connect the capitals, all the large cities, and several small and medium-sized towns in the region for about 4,000 km. Its name is a metaphor to designate the road base of the Guianas in an integrated way, since in each country it has a specific name. This *multinational highway* draws attention because of its size and the possibilities it offers for regional physical integration. It includes highways 156, 401, and 174 in Brazil; the RN 1 and 2 in French Guiana; the east-west-north route in Suriname; the Corriverton-Georgetown, Georgetown-Linden, and Linden-Lethem links in the Republic of Guyana; and Trunk Road 10 between Santa Elena de Uairén and Ciudad Guayana in Venezuela (Figure 5).

Figure 5: Trans-Guyanese highway and its inland ramifications



Source: Own elaboration.

The Trans-Guyanese highway is well-structured, but it still lacks maintenance in heavily used parts of the road, and, in other parts, it needs paving, especially in the northern and southern extremes of Amapá, between Laranjal do Jari and Macapá and in Oiapoque, such as between Linden and Lethem⁴ (Figure 6). In addition, in some parts of the road, the circulation is hindered by the ferryboat operating hours for border crossings (Suriname-Republic of Guyana border), by the difficulty in obtaining entry visas for people from neighboring countries (French Guiana's border with Brazil and Suriname), by political instability (currently the case in Venezuela) or by occasional conflicts with indigenous communities, as is the case in the Uaçá

4. The Georgetown-Lethem Road, about 550 km long, was only opened in the 1980s and has been included in regional and international integration projects - the road was divided into the already completed Linden-Georgetown and the still precarious Linden-Lethem projects as part of international initiatives to connect the Republic of Guyana to Brazil.

valley, in Amapá, and in the Waimiri- Atroari land, between Roraima and Amazonas, all in Brazil.

Figure 6: Precariousness on the Trans-Guyanese highway



Source: fieldwork (2019, photo by Gabriel Flores).

To travel the entire Trans-Guyanese highway, it is necessary to cross about 300 bridges, two of which are international (over the Tacutu and Oiapoque rivers), cross rivers by ferry (Corantyne and Maroni), and cross the dry border between Brazil and Venezuela. With the opening for circulation of the international bridges over the Tacutu (2009) and Oiapoque (2017, Figure 7) rivers, the expectations of physically connecting the Trans-Guyanese highway with the Pan American route, of which it is part, to travel - by land - the 25.8 thousand km of the Pan American route crossing the Americas, from Patagonia, in Argentina, to Alaska, in the United States⁵ (Figure 5).

The bridges were fundamental for the territorial articulation of the main cities of the Guyana region. Should plans for the construction of international bridges over the Maroni and Corantyne rivers materialize in the future, a fundamental step in the region's unraveling will be overcome. In addition, there is also the interconnection of the Guyana region with the regional outside world through Santarem via the BR 163 highway in Brazil (Cuiabá-Santarem) (Figure 5).

5. See Didik (2016) and Garbin (2017).

Figure 7: Binational bridge over the Oiapoque River



Source: fieldwork (2019, photo by Gabriel Flores).

Boa Vista, in Brazil, became the *great node* of regional road integration in the twentieth century with the opening of the Boa Vista-Ciudad Guayana, Boa Vista-Manaus and Boa Vista-Georgetown axes, making it the only city to have road integration in the entire Guyana region, even though there are bifurcations from Paramaribo and Macapá to the interior. If the proposals for a Boa Vista-Macapá link, with a connection node to Suriname, and Boa Vista-São Gabriel da Cachoeira were to come into effect, Boa Vista would reinforce its role as a pivotal city in regional road geopolitics, while the Guianas would be more physically integrated in the dense Amazon jungle.

Aerial Circulation

After World War II, commercial aviation took off, turning airplanes into one of the main means of transporting passengers and goods

worldwide. In the Guianas, airplanes played a fundamental role in speeding up the movement from the coast to the interior of the country, while promoting the main articulations of these countries with the world. In the entire region, there are only eight international airports, all of them on the borders of the region, except for Boa Vista, while the regional airports have a greater capillarity in the communication between cities in the region, and there are also more than a hundred runways used intermittently, many of them in the Republic of Guyana and Suriname (Figure 8).

Figure 8: The aerial connections of the Guyana region



Source: Own elaboration.

Although air traffic is fundamental for the agility of the connection between the border and the interior of the region, it is insignificant and expensive. Even so, regional airports such as Lethem, in the Republic of Guyana (Figure 9), and Maripasoula, in French Guiana, are frequently used by the region's inhabitants. In the airline industry,

the Kourou space base is of particular interest, where commercial satellites have been launched since the 1980s. The base, which is managed by the European Spatial Agency (ESA), has three launchers installed. The first, historically rich, is Ariane, world leader in the commercial satellite market, with an average of six releases per year. The other two launchers, the Russian Soyuz and the Italian Vega, allow the range of satellites supported by Ariane to be varied.

Figure 9: Runway at Lethem



Source: fieldwork (2019, photo by Gabriel Flores).

A GEOPOLITICAL OVERVIEW

The region's history has been based on frequent cycles of migration, movements, and settlements, temporary or otherwise, with political choices and strategic orientations to open roads, create ports, airports, and railroads, which, over more than five centuries, have

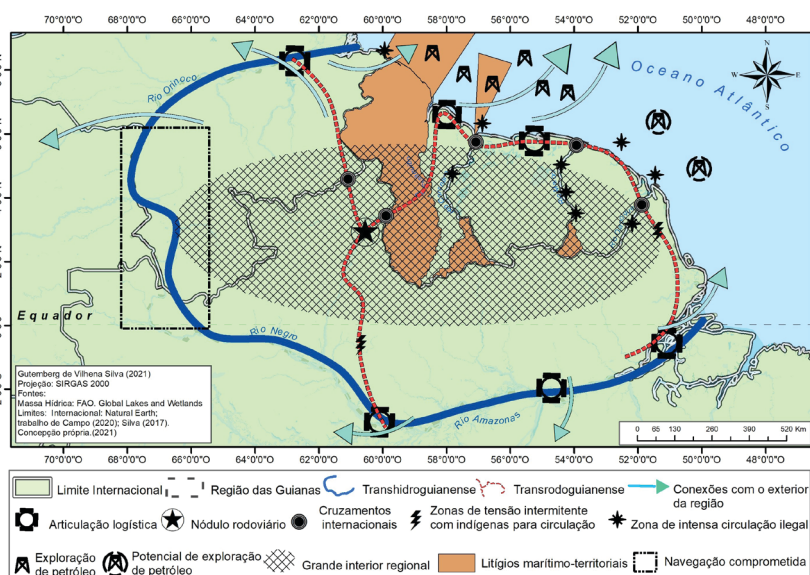
designed the current profile of its multimodal structure. Brazil, although it has the largest share of the Guyana region, has not directed effective major attention to establishing many territorial interactions with its neighbors in the region nor to creating a robust transportation network. Two reasons may help to explain it: firstly, it was only in the second half of the twentieth century that the Brazilian Guiana was integrated into the national logistics system, even in a very small way, with an insignificant transport structure in the area; secondly, there was the promotion of a significant amount and considerable territorial dimensions of the establishment of areas with the purpose of environmental protection (REDE AMAZÔNICA DE INFORMAÇÃO SOCIOAMBIENTAL GEORREFERENCED [RAISG], 2019), but also serving as a buffer zone against the proliferation of towns and cities that would allow for greater capillarity of Brazil in the Guianas.

Besides environmental reasons, it is worth remembering that the integration of this northern and Guyanese part of Brazil was defined after World War II as a national priority by Brazilian geopoliticians Golbery do Couto e Silva and Carlos de Meira Mattos. They feared that the demographic emptiness of this gigantic frontier area at the Amazon-Caribbean interface would arouse the interest of neighbors (Colombian guerrillas, Anglo-Guyanese drug traffickers and missionaries, Cuban allies, etc.). In fact, British Guiana, later independent (in 1966), and the neighboring and recently emancipated Suriname (in 1975) were involved in the Cold War conflicts (MEIRA MATTOS, 1975; SILVA, 1967), being that one of the reasons to the implantation of the North Gutter project.

The establishment of buffer zones, as mentioned above, is also relevant in Venezuelan Guiana, where practically 70% of its Guyanese territory has some type of restriction for use, and in almost half of French Guiana's territory, especially in the south. Still in relation to Venezuela, it should be considered that the country directs its central

strategic policies toward the oil zones outside its territorial slice in the Guianas, whose greatest geopolitical importance, although still lacking effective attention, are the Orinoco delta and the possibilities of fluvial connection with Colombia (via the Meta river), Brazil, and the Pacific axis, the latter through the Amazon/Solimões river and from there to the Pacific Ocean.

Figure 10: Geopolitical overview of the logistics structure



Source: Own elaboration.

The so-called “Three Guianas” (Republic of Guyana, Suriname, and French Guiana) have some peculiarities that also help us to understand the logistical configuration of the region. The first two achieved independences less than 60 years ago and all colonial interest were - and still are - focused on agro-mineral extraction, without in fact achieving the integration of the regions and cities of these countries with strong proposals for regional development, while French Guiana, today an integral part of France, provides to its country a

relevant portion of natural capital that is increasingly important for the future of humanity, and this motivates it not to create internal circulation axes, so that this Amazonian strip remains with its environmental layer preserved, which does not prevent, as in Suriname and Venezuela, the penetration of thousands of prospectors coming essentially from Brazil in zones of intense illegal circulation. Furthermore, the discovery and production of oil in the Republic of Guyana and Suriname and the beginning of prospecting in the coast of Amapá and French Guiana channel even more geopolitical attention to the oceanic coast, diminishing the interest in creating a logistical base that better integrates the interior with the coast (Figure 10).

Figure 10 reveals that there is a correlation between the road-fluvial joints and the only road node, precisely where there is a demographic concentration (Figure 1). These links are close to the mouths of the two largest rivers in the region, the Orinoco and the Amazon, and on the Atlantic coast, ensuring the possibilities of Atlantic-Pacific integration, penetration into South America, via BR 163, in Brazil, and the interface with the Pan-American route in the far west of the Guianas. Finally, we must also mention the two areas where road traffic is compromised by possible problems with indigenous communities in Amapá and Roraima.

Conclusion

Geographical conditions and territorial policy options have determined the configuration of multimodal transport in the Guianas, characterized by poorly articulated networks, high circulation costs, and long periods for intra and inter-regional commercial activities. In general, the rivers have always been the most important routes in the region, especially for the traditional communities, but roads, railroads, and airports have also gained space, even if this is recent and poorly structured. Two logistical structures are the determinants of

the regional Geography of Circulation: the Trans-Guyanese highway, on the north-northeast edge, and the Trans-Guyanese waterway, on the south-southeast edge.

An old hydrographic network that is still central to the dynamics of circulation in the *living space* and to the movement of large goods is key to understanding the fundamental basis of the logistical structure of much of the region. Overcoming the transport difficulties through the Cassiquiare Canal in Venezuela represents the possibility of organizing the effective and efficient interconnection of the Orinoco and Amazon basins, and creating a cargo transportation system to meet regional needs, as well as interconnecting spaces and territories that remain relatively isolated. One of the weaknesses of the physical integration of South America has been the difficulty in improving waterway transport, which has advantages due to its low cost and natural facilities for the massive transport of goods over medium and long distances.

An almost nonexistent railway base was created and incipiently used, but it was essential for short distance connectivity between the 18th and 19th centuries in Suriname, Venezuela, and the Republic of Guyana, but today it is of almost no logistical use. It is a not very complex road network with only one nodal point, in Boa Vista, but of great geopolitical value, that was implemented to cross and integrate the regional coast to the interior and with the Pan-American route. The construction of bi-national bridges and many others along the Trans-Guyanese highway was the option found to overcome the crossing, by land, of the many rivers in the region, and thus eliminate bottlenecks in road traffic.

A not very complex air network, with regular flights and small aircraft responsible for connecting distant and difficult-to-access areas with optimized time, was a determining factor in reducing travel time in the region. There is a need to think about strengthening and articulating the existing land, river/sea, and air transport routes in order

to increase the efficiency of transport in relation to the resources expended and to better articulate regional cooperation in the Guianas.

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Thanks to

This work was supported by the project entitled Estudos de Fronteira em Perspectiva Multidisciplinar e Multidimensional, of the Federal University of Amapá - UNIFAP. We take this opportunity to thank Stephane Granger, Jadson Porto, Tatiana Garcia, and Wanderley Costa for reading and considering the preliminary version of this text.

GEOGRAPHICAL AND IDEOLOGICAL FEATURES OF EURASIANISM

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Introduction

Why does Russia invade its neighbors? With this question, the critical geographer Gerard Toal opens his recent book, *Near Abroad: Putin, the West and the Contest Over Ukraine and the Caucasus* (2017). John Agnew, one of his mentors and Geography professor at UCLA, in his short comment on the book, closes his statements with another question: Is Russia really so tired of Empire? (MURPHY et al, 2017). These questions are instigating and led us to the following pages, trying to unfold them in order to answer them in a larger time and space frame. To understand contemporary Russia, it is necessary to have some outlook on what is called Eurasianism. Not that the two equate each other, but a big part of the basic concepts, strategic geopolitical vision and ideological convictions are found in the latter and have more influence that mainly regarded to, specially when trying to understand some of the more cryptic world views that stem from 19th century Russian history and intellectual trends.

The types, levels, concepts and ideology of Eurasianism are not well known in the west or are sometimes confused with other terms and refer to currents of thought that are not straight-forwardly identifiable and/or recognizable in typical western analysis. As Eurasianism

presents itself in contradictory ways that show different epistemological backgrounds and even paradoxes or eclectic fashions, at first glance it can be seen as a mixture of traditionalist views and, modern and postmodern concepts. But most of all, there is a background that prospects Eurasianism as a civilization with a special role to play as a model of integration of different peoples or ethnos, generating multiple views in a common Geographical Big Space.

In order to grasp some of its basic features, we begin by discussing some of the multiple meanings of the term, specifying its types, levels and the special role geography plays in its conception. Then we turn to its ideological content where it intersects with classical geopolitical thinking and finally, outline some preliminary conclusions.

Is Eurasianism definable?

As in many cases when trying to define a phenomenon, it is easy to simplify it in search of the appropriate wording. Eurasianism can be characterized as a political philosophy and a geopolitical strategy that encompasses a historical perspective and an ideology. It combines traditionalist, modern and postmodern elements in an array of types, levels, and strategies. In geographic terms, it is viewed sometimes as the space of the late USSR without the Baltic states, that relies on being a unique civilization different from Europe and Asia. In this sense, it is often seen as the “Third Continent”. In political terms, it can be seen as a so called Third or maybe Fourth Way (DUGIN, 2012) with conservative hues, anti-universalist and anti-liberal approaches and an independent development path self-regarded as an unique civilization.

As just stated, it’s historical development, mainly during the 20th century, shows different types of Eurasianism (LARUELLE, 2008) that can be summed up in the following:

1. Classic Eurasianism in the 1920 and 1930’s.

In this period, the most outstanding intellectuals were Pietri Savitsky, a geographer and economist that developed a structuralist geography, and Nicolai Trubeztkoi, maybe the best known and a very accomplished structural linguist. He founded the *Circle Linguistique de Prague*, was the creator of Phonology and had a great influence on western structuralists, from Noam Chomsky to Claude Levi Strauss.

During this period, the westernization of the czars was seen as one of the causes of Russian collapse and there was concern about the influence that the First World War would have on the territorial integrity of Russia.

Classic Eurasianism focuses on establishing geographical and philosophical differences between Russia and the west, as to ground the bases of a civilizational quest for separation.

2. Soviet Eurasianism during the URSS: It is based on the work of Lev Gumilev, whose ethnography, ethnology and history knowledge served as the bases for his rejections to what he considered to be a western view of Russian history. Particularly, he showed disbelief in the historical version that linked Russia's history to Central Asia (SEERGEVICH, 2005).

Gumilev was a very charismatic intellectual figure, especially during the last years of his life in the last decades of the 20th century and, after his death, in the first decades of the 21st. He was the son of Nikolai Gumilev and Ana Akhmatova, both renown and celebrated poets, not only in the USSR but also in the west. Akhmatova was postulated more than once to the Nobel Prize and though never one it, the visibility it gave her served as a platform to denounce the Stalinist regime, which led her to prison several times. Her prestige was important when having to deal with her son's imprisonment with Stalin himself, to whom she plead for him to be freed from the Gulag. Lev survived it after 13 years, time he also used in his history and ethnology studies that resulted in his ethno-genesis theory, which had a big impact on Eurasianism during this period and further on.

In those 13 years, he dedicated himself to the study of the peoples of the Taiga, Tundra, Steppes and Urals and consolidated his visions on ethnology (SEERGEVICH, 2005).

3. New eurasianism or Neo-eurasianism, from the 1990 on, was an answer to the disappointment with the soviet collapse and rejection of the idea of Russia's future being in the west's hands. The most important figures are Aleksandr Panarin and Aleksandr Dugin, the former known for his multipolar model of the world and the latter as a polemic ideologist and strategist. Their purpose is to find new ideological and political niches for Russia and to reestablish the country's prominence.

A. Dugin is maybe one of the most controversial and commented Russian intellectuals of the last decades. His work – more than 10 books and several articles as well as editor of on line and printed journals - has been translated to English, mainly by American academics which share his world view, many of them second and third generation of Russian immigrants with academic status. He had a very fluid exchange in the American academy until his visa was cancelled after his support to the Crimea annexation in 2014.

There are also levels of analysis in Eurasianism (LARUELLE, 2008) that are important in order to understand the priorities and world-view that it stands for:

1. The State
2. The ethnos or peoples
3. The super-ethnos or cultural groups
4. Civilization

The ethnos and super-ethnos are terms developed by Gumilev in his ethno-genesis theory. In a nutshell, the ethnos is a group of peoples that have adapted to local geographic conditions and develop behaviors that serve as unifying forms to the group. As they aggregate, they shape the super-ethnos and later, civilizations, in an ever larger geographic assembly (SHLAPTENTOKH, 2007).

Civilizational level is the most important one in Eurasianism. According to this view, each one has its own structure and is defined in a temporal and special axis, that is, it supports a timeline but also it refers to particular ecologies in which each civilization develops. The temporal axis gains life in the spatial one reminding us of the Heideggerian *Dasein*, where being and place are ensembled.

It is worth noting that the national level is not taken into account, for it is considered a more western phenomenon and concept and therefore, problematic in the context of Eurasianism. On the other hand, as the civilizational level gathers the rest through a set of shared values, civilization is defined as a “historic common destiny”.

The political power lies in the State, but it depends on the values of the ethnos and super ethnos. If the values change, the State loses legitimacy and collapses. Hence, organizing and maintaining the ideological power in the form of civilizational values is a key, if not the key of the Eurasian strategy.

Both the State and the ethnos are ideocratic, (DUGIN, 2012) meaning that the power is in the ideas, considered far more important than material values. This reflects an idealistic posture that can be tracked back to the German conservative revolution and is present in all the levels of analysis of Eurasianism.

Power distribution: Geography and civilization

For the Eurasianist view, geography determines the global distribution of power (SHLAPTENTOKH, 2007), but not in the sense of distribution of resources. On the contrary, geography molds the existence, size and compatibility of peoples, cultural groups and civilizations.

Gumilev’s ethno-genesis theory states that humanity adapts to environments by changing behaviors and values. Every peoples, culture and civilizations correspond therefore, to a specific place of development and their values represent a unique adaptation and specialization to the

geography of the earth. The civilizational level consists of ecological blocks of continental size: the European peninsula is the western European civilization, the desert plains of the Arabic desert correspond to the Muslim Arabic civilization, and so forth. Nevertheless, in the northern European and Asian places, classic Eurasianists claim the existence of not just a block, but a complete geographic system. Here the regional strips of tundra, taiga, steppes, and deserts expand for over half the globe in a regular progression, that shelter the cultural groups of the Urals, Russians, South and North Turks. These strips are interlinked thanks to three “interaction zones”: the Russian plain, the Turkistan plain and the Siberian plain to the east. These regions act as paths of ecological and cultural exchange and are responsible for inducing complementary cultural exchange and mutual trust between groups, out of which came about a unified Eurasian civilization (SHLAPTENTOKH, 2007).

But if these plains stimulated mutual trust or complementarity between Eurasians, then can a similar type of trust be created with Westerners? This possibility was strongly denied by classic Eurasianists that saw the big range of differences in temperature, agricultural practices, linguistic phonology, etc. as impediments for any type of complementary exchange and reaffirmed the geographic and civilizational separation between Eurasia and Western Europe.

We can then conclude that from geography, Eurasianists derive a series of matters (SHLAPTENTOKH, 2007):

- Eurasia exists as a natural and independent system. This indicates that the Eurasian civilization that originated from this natural system has its own independent and unique values.
- Those values represent a unique adaptation to the environment, which also happens in other civilizations (there is a correlation between values and the environment).
- Ideological differences are therefore a reflection of the earth's diversity and any reference to universal values makes no sense, which explains Eurasian anti-universalist world-view.

- A geographic teleology is implicit in the above, a *telos* that correlates with the specific values that emerge in specific geographic localities.

In an ideal Eurasian world, each civilization should let the others develop independently, with no intervention. However, there is one civilization, according to classic Eurasianists, that fails to follow the rule, the Roman Germanic, which in the New Eurasianists corresponds to the Atlantic civilization of the Anglophone states. The main geographical characteristic is its peninsular or insular condition, based on the sea or thalassocratic civilization, where in structural terms the parts are more important than the whole, and in civilizational ones, values such as individualism, materialism, that are in the base of liberal ideology, as well as rationalism and universalism, are appraised and reinforced. These are the values of western civilization. Eurasianists do not have a problem with western values if they pertain to that civilization. However, universalism by definition has bigger ambitions and that is why the west insists in exporting its values globally. This insistence presents itself in two ways: first, in a quest to convert others to western views and, second, by creating a discourse of values that judges other civilizations as progressive or backward, depending on their resemblance to western society. And furthermore, universalism goes hand in hand with global western hegemony, exemplified in colonial empires, American unipolarity and global capitalism. On the other and, in order to achieve the status quo described, the west stimulates other civilizations to let go of their own values, thus becoming simple imitators, always a step behind of the real westerners. Also, as Atlantic values come from a determined local, to adopt them in a different geographic environment dissociates the civilizations from their own medium and creates internal fractures that permit the west to divide and conquer (SHLAPTENTOKH, 2007).

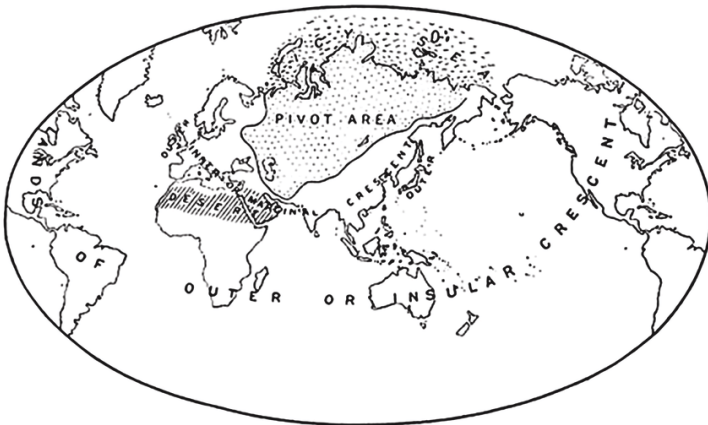
Classic Eurasianists were positive about the fact that the westernization of the czars had created a divide between the aristocracy and

the masses, the Russians and the other peoples that, with the victory of the revolutionary Marxists originated in the west, finally broke the civilization and led to a class and race war. New Eurasianist A. Dugin saw similar results coming from de-stalinization, Perestroika and the Yeltsin era, basing his analysis in the loss of territorial power in all three cases and not in ideological considerations.

Eurasianists see as a logical outcome, the global domination of a western oligarchy, that is getting richer by exploiting and subduing the rest of an ever more chaotic world. Consequently it is an imperative, not only Russian, but global, to resist to western universalism and Eurasianism sees itself as the natural leader of anti-western resistance.

Stemming from Hartford Mackinder's theory of the geographical Pivot or Heartland, they argue that their geographic nature as a terrestrial power or Tellurocracy, self-contained and intra-continental makes Eurasia less vulnerable to the thalassocratic pressure of the west. Only a united Eurasia can help other civilizations. For Eurasianists, the opposition of Thalassocracy vs. Tellurocracy is the epistemological and ontological base of Geopolitics.

Figure 1. H. Mackinder's Geographical Pivot or Heartland



Source: H. Mackinder, (1904).

The question that arises is how to get a unified Eurasia. It is necessary to define what unification means for it does not necessarily encompass total political unification. Since every peoples represent a specialized adaptation to its environment, local autonomy must be protected. Unity is essential, in consequence, only in matters of civilizational importance such as foreign policy, intergroup relations, macro-economy and a common ideological structure (SHLAPTENTOKH, 2007). The possibility that Eurasianists accept a block of states aligned to Russia, sovereign in general terms, but with differences with Moscow in certain subjects, cannot be ruled out.

Eurasianism stresses the idea that political arrangements tend to a “natural order”, mainly in the sense that geographical unity leads to a political one, naturally. The fact that this does not happen in reality is due to forces that violate the natural order, such as the material power of the west, the expansion of western values such as self-determination and so on.

Based on these ideas, Eurasianists recommend for Russia –always the unifier state thanks to its size and interaction with all the other peoples of Eurasia – to search for policies that defend and cordon off western power, letting nature keep its course by doing so.

A. Dugin proposes a bulwark that extends through Eastern Europe and the Middle East: this not only separates Eurasia from western power but transfers the focus of energies out of Eurasia. In ideological terms, even without a total control of communications, this cordoning off can take the shape of alternative media or misinformation or even sheer conspiracy tactics.

Eurasian unification can also require an adequate internal organization. To defend the unity against western universalism, classic Eurasianists proposed an ideological symmetry and an ideocratic mobilization. They used fascist Italy and their policies as a model while Dugin looks up to Stalin as his.

Eurasianist ideology

The exact content of their ideology is very debated. The majority, however, agree on two things: first, to reject western discourse about universal values, individualism, materialism and progress, and instead, promote “natural values” such as collectivism, spirituality, and civilizational uniqueness. And second, reinforce the complementarity between Euroasiatic peoples. Gumilev, particularly, rejected what he called western versions of Russian history such as the legends of the Mongols as savages and the medieval Rus that gives rise to a separate ethnos (GLEBOV, 2011). He thought these were western distortions to promote division amongst Russians and Central Asians. There is a clear dispute about Russian history with the neighboring countries, particularly with Ukraine, where Euriasianism does not accept divergent ethnos between them, and on the contrary argues for a common origin. This is one of Putin’s strong grounds for considering and uttering that Ukraine is not a nation or even a state, for its history is the same as that of Russia. A. Dugin’s position is completely aligned to Putin’s.

There is no straightforward agreement on how an Eurasian ideology should be. The classic Eurasianists insisted on maintaining the orthodox values, while Neo- Eurasianists, especially A. Panarin considered the idea of a great synthesis between Orthodox and Turkish Islam views. A. Dugin’s Fourth Political Theory (2012) advocates for a general idea of civilizational and spiritual distinction. Anyway, there are certain characteristics that can be stated about Eurasian ideology. The first is differentialism, which is the conviction of the need to have a plurality of values systems versus a unique one. The second, twin sister of the first, is the dismissal of universal values such as universal rights and collectivist materialism, that shows Eurasianist rejection to historical materialism in terms of its philosophy and to Bolshevism in terms of social and political action. There is also a refusal of the

idea of progress where time can be understood as cyclical, another of Gumilev's intellectual contributions picked up by A. Dugin in his analysis of the collapse of the Soviet Union. He thought of it as a temporary setback, one of many in Russia's long history, when a collapse usually led to a new glorious rise (SHLAPTENTOKH, 2015). There is also an influence of historians such as O. Spengler and A. Toynbee in this conception of time. Eurasianism promotes values considered "natural" such as collectivism, spirituality and civilizational exceptionality, amongst others. The *ethnos* is considered the natural subject of history in contrast with other historical subjects such as class in Marxism or race.

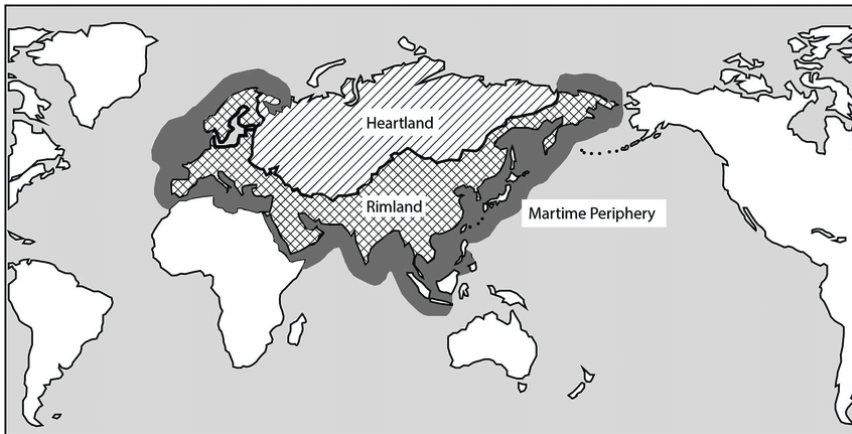
In politics, a so called "organic democracy" or *demotia* is proposed, specially in Dugin's Fourth Political Theory (2012), where instead of a one- vote one- subject system, there are local governments that lead society to self-government, if it can account on feedback mechanisms. There is also a dismissal to party like structures in the political realm.

The Eurasian agenda for domestic politics generally reflects classic Eurasianist Savitsky's idea of "mastercracy" (GLEBOV, 2011). It rejects that politics can be reduced to one or two metrics, as the voting system or opinion polls. Here, the "masters" exercise a benevolent leadership over society and nature and are not raised accountable by the subjects they lead, but are ideologically motivated to promote the development of the peoples in harmony with the natural order. "Mastercracy", hence, promotes a top down vision and interaction in society. In the economy, Dugin translates this in state control over strategic sectors such as defense, natural resources, communications, finances, in order to guarantee that profit does not exceed the civilizational values or unity. Having ideology as a means of unity, the ideal Eurasian society promotes a strategically directed government in top down fashion with a strong local autonomy.

This is only the beginning of the historical task of Eurasianism; the next goal is to rollback western influence in the world. A unified

Eurasia, in Neo- Eurasianist A. Dugin’s perspective (2014), is facing a world dominated by Atlanticism. This has a threefold expression: (i) in geographic terms, Atlanticism controls the Pacific and Atlantic rims that allows it to pressure all coastal civilizations beside the rimland in an “Anaconda Strategy”; (ii) in institutional terms, the Atlanticist domination is based on a series of formal and informal arrangements, from NATO to the US currency and transnational companies; (iii) in informational terms, there is the control over the mass media and communications that serve as a platform for Atlanticism to influence the world with its discourse on values.

Figura 2. Anaconda Strategy



Source: N. Spykman (1944)

Eurasianism’s answer to this status quo is asymmetric and hybrid war. To avoid competition in sensitive sectors or with enemies with a favorable balance of power, Dugin suggests to direct energies to the areas of their advantage such as natural and energetic resources, the meta dimensions of power such as international law-making and the global decision making political process. Here Dugin stresses the importance of using cyber-space as a means capable of by-passing formal institutions of Atlantic hegemony. Internet asymmetric war

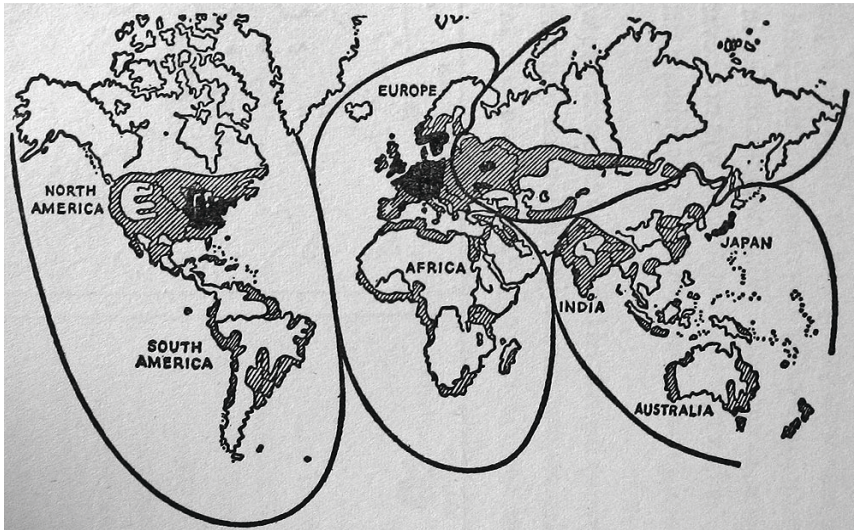
mines Atlantic informational hegemony and allows Eurasianists to present their alternative civilizational values (DUGIN, 2014).

In strategic terms, the rollback should start “everywhere” in what Dugin calls the “coalition of the unsatisfied” (DUGIN, 2014). Eurasianism needs to make a common front with any anti-Atlanticist movement, independently of ideology because even the most futile and irrelevant movement serves two purposes: first, it presents an alternative to Atlanticism and second, removes Atlanticist resources from central areas of competition. And also, Eurasia needs to gradually substitute Atlanticist hegemony with a new multipolar global system. A unified Eurasia will have already bulwarks in Eastern Europe (Belarus, Ukraine) and in the Middle East (Syria). The constriction of the Anaconda is to be definitely broken with a strategic partnership with India and Iran that gives the Eurasian block a regulatory interaction of “central position” between Europe, Asia and Africa (DUGIN, 2014). Eurasia can then explore the advantages of its central position to erode the Atlanticist power in Western Europe and East Asia, promoting their return to a civilizational independence in a great alliance that links Germany, Japan, India and Eurasia (DUGIN, 2014). In its new natural environment, Atlanticism will reassume its correct position, just as one of the four poles of global power: Western Europe, East Asia, the Atlantic civilization and Eurasia.

This system is sustainable only with a global economic and social reorganization. Dugin argues that the previous model of geographic integration that had Atlanticism as its center and all the rest in the periphery, has to be changed for a vertical belts model (DUGIN, 2014) where north civilizations have more contacts and interactions with their southern counterpart, instead of the northern ones between themselves. The idea is to hasten the civilizational and developmental integration of the global south to give rise to an international system where all civilizations are strong and independent enough to participate as equals- a reflection of the natural order of the earth. The

vertical belts model has enormous resemblance with K. Haushofer's pan-region model as can be seen in figure 3:

Figure 3 K. Haushofer's pan-regions.



Source: <http://euro-synergies.hautetfort.com/media/01/01/2911432571.jpg>

What becomes visible is the making of a multipolar world. However, it is important to stress that there are other models of multipolarism, apart from the Eurasianist one. There is the Chinese model, the New European Right model with Alain de Benoist's theory of ethno-pluralism leading it, and there are also several Latin American models: André Martin's Meridianism (University of São Paulo); the Fundante Insubordination of Marcelo Gulio Omodeo of Argentina and also Left wing Peronism of Argentina with Norberto Cerosole.

Figure 4. Multipolarity Model



Source: A. Dugin (2021).

Eurasian multipolarity premises are that sea power is unipolar, hegemonic and globalist while land power is multipolar, counter-hegemonic and anti-globalist. It is based on the presumption of the existence of a plurality of civilizations, without hierarchies between them. In conceptual terms, it accepts critical theory in international relations, constructivism, defies any type of eurocentrism and/or universalisms. It also accepts post-structuralism with its critique of objectivity and the relativisation of scientific or historical truth. Discourse is accepted as a method of interpretation, sharing this view with critical geopolitics.

With this general view of the strategic logics of Eurasianism, we can now consider how this translates into practical terms. Certainly, aspects of Russian strategy such as the stress on civilizational separation and sovereignty, special Russian values and the use of asymmetric and informational warfare are aligned with Eurasian thinking. But does this mean that Russia is effectively applying Eurasian theory? To answer this question, two things must be taken into account: (i) Eurasianism is not necessarily popular in Russia because both ethnic

nationalists and the population in general fear this strategy would mean Russian sending resources and receiving immigrants from the poorer Central Asian states; (ii) the Eurasian figures are frequently used to justify non Eurasian objectives. Kazakhstan, for example, has been a constant proposer of Eurasian ideology, but in behalf of the uniqueness and sovereignty of the Kazakh, as a counterpart to the integration led by Russia. This can also be the case in Putin's "pragmatic Eurasianism" where Russia gets involved with Eurasian integration, but it is justified in liberal or Atlanticist terms. Dugin sees this as the wrong strategy and knows that it is perfectly possible to integrate in a non Eurasianist fashion, something he strongly rejects in any Russian leader.

A good example of the Putin's pragmatism is the Eurasian Economic Union- EEU, established in 2015 and that involves Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia. Putin himself has emphasized that the EEU is not an instrument of political union, but that with it, its members can negotiate from a stronger position and hence, obtain more of globalization, clearly stating a non Eurasianist position. Simultaneously, while taking down barriers, creating a unified capital and labor market and coordinating macroeconomic policies, the EEU gives impulse to an economic Eurasian block whose development can be directed from a single strategic center.

But there is nothing straightforward in Putin's actions. Despite his globalization rhetoric, his Eurasian integration also rejects western influence, something that was visible during his strongly disregard to Ukraine's attempts to join de EU, which ended in the Euromaidan protests and the political crisis afterwards. In any case, while Russia has as its foreign policy Eurasian integration, this is not equivalent to Eurasianism. Putin's pragmatism and domestic opinion are sometimes allies, sometimes in counter positions. It is hard to predict if this ideology and strategic view will become a formal policy of the State in the years to come.

Conclusions

Eurasianism defines power not only politically, but also in terms of geographic civilizational values, hence showing a geographic teleology. Those values reflect a distinctive adaptation to the environment that is the reason to strongly reject universalism promoted by western hegemonic thought. To attain this, Eurasianism proposes a unified civilization mobilized ideologically in order to establish a multipolar world.

It projects a supranational political entity based on a geographical ideology of political unification inside the frontiers of a great continental space, a Geopolitical ideology based on Carl Schmitt and H. Mackinder's Big Space theories. It also consolidates an identity in a "geopolitical politics" broader than the national level, that influences the formation of the State and international integration.

The continentalism that is implicit in the multipolar proposal can be associated with authoritarian tendencies, such as in imperial expansionism, or with democratic ones such as in anticolonial liberation movements. The ethnos as locus of civilizational values is an essentialist view as well as a deterministic one, where identities are unchanging and non-relational.

Ultimately, the intellectual diversity of Eurasianism covers a theory that belongs to the domain of Classic Geopolitics with visions and concepts such as Heartland, Rimland, land vs. sea powers, buffer areas, big space, etc.

Eurasia, thus, seems to be a meta-construct, malleable and flexible in its physical frontiers and very effective as a project and representation of a mega region, for political unification and geopolitical strategy purposes.

In any case, Eurasianism has to be taken into account. Its declaration about civilizational uniqueness and the corrosive nature of western universalism attracts Russian as well as other kinds of

supporters. But it also blinkers Russian strategic perception. When picturing western values as incompatible and particularly aggressive, Russia misses the chance of reflecting on what it is about these values that is so powerful and attractive. The conflict between Russia and the west also eternalizes with no room for any type of permanent compromise. Eurasianists also disregard the power of material force, convinced that they can overcome it via ideological mobilization and asymmetric warfare.

Unfortunately, reality seems to indicate the contrary. Even the “natural order” of the Eurasian economic integration has been reversed since 2015 and 2016, thanks to the impact of the west’s embargos due to the annexation of Crimea and, Russia’s role in the Donbas region recently invading and having deflagrated a war in Ukraine.

Finally, the intellectual diversity of Eurasianism conceals a theory that is short in experience and political practice, even though its ideal of a world made up of different and independent civilizations may be attractive for many. The question continues to be, however, why does Russia invade its neighbors? (TOAL, 2017).

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TRANSBOUNDARY RIVERS AND THE BRAZIL-BOLIVIA BORDER: WATER GOVERNANCE AND USES IN THE CENTRE OF SOUTH AMERICA¹

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Introduction

The Plurinational Republic of Bolivia shares its longest border segment with Brazil. It extends for 3,403 km, corresponding to 47% of the territorial limits of Bolivia and 21% of the Brazilian boundaries (CIA 2017). Watercourses comprise about 65% of the international boundary, totaling 2,222 km (IRBD *s.f.*). Given its central position in the South American continent, the Brazil-Bolivia border is inserted into the continent's two biggest hydrographic river basins: the Amazon and de la Plata, which adds considerable complexity to the border governance at the present. These two river basins will be the spatial

1. This text was originally published in: Los ríos transfronterizos y la frontera Brasil-Bolivia: la gobernanza hídrica y los usos del agua en el centro del continente sudamericano. Revista **Scripta Nova**. Vol. 25 Núm. 3, 2021. Disponível em: <https://revistes.ub.edu/index.php/ScriptaNova/article/view/32588>

framing, and their rivers will be used for the geographical description of the Brazil-Bolivia border (Figure 1).

Figure 1: Location of the Bolivia-Brazil border and of the shared hydrographic basins.



Source: authors.

Theoretically, the article seeks to contribute to the debate on the governance of shared rivers, which cross international boundaries, an issue of great relevance due to the increasing water insecurity generated by climate change. Elaboration of governance and management tools for cooperation at the international level is an issue of concern present in all the United Nations Goals for Sustainable Development (SDG), especially the one focused on the availability of water and sanitation (SDG 6). The SDG 6 summary progress indicates that 59% of the countries with transboundary river basins have operational agreements for cooperation, with periodic meetings for joint management and well-defined action goals (UN Water 2020).

Furthermore, according to UNESCO, there are about 260 transboundary basins worldwide (WWAP 2018). On the one hand, the shared use of transboundary river basin waters is characterized by the production of energy, irrigation, and human supply. The river basin is generally the administrative unit to frame transboundary cooperation, partially highlighting the importance of the hydrological cycle. However, its adoption as a political unit brings new challenges to the interaction of different actors situated inside the basin, often with antagonist interests that can be sources of tension and conflict. Hence, it is essential to note that adopting the river basin is a political decision that leads to accepting a geomorphological feature of water governance (MOLLE, 2009). In other words, the policy overlaps the natural setting, especially in complex river basins, such as the Amazon and La Plata.

It is also necessary to emphasize that, in the cases of a transboundary river basin, the diplomatic tradition is based on the country's absolute or relative sovereignty (BARTELSON 1995; KRASNER 2001). However, when considering the transboundary waters, it is essential to resort to the idea of shared sovereignty. It will allow exploring new forms of cooperation (RIBEIRO 2010; RIBEIRO 2012) that facilitate

the creation of management instruments, guarantee more equitable access to water and generate less tension and conflict.

Although South America is already home to consolidated institutions for cooperation in transboundary waters, such as the Intergovernmental Coordinating Committee for the Plata Basin Countries - CIC Plata (1968), the Plata Basin Treaty (1969), the Treaty of Amazon Cooperation (1978) and the Amazon Cooperation Treaty Organization - OTCA (1998), there is still a long path to develop management tools to guarantee more equitable and solidary water access. In the search for cooperation, a territorial cut-out that has been adopted to organize political relations around international waters is that of the hydrographic basins, especially that of the Amazon River (TIGRE 2019) and the del Río de la Plata (RIBEIRO, 2017; VILLAR, RIBEIRO and SANT'ANNA, 2018; SILVA and HUSSEIN 2019; ESPÍNDOLA and RIBEIRO 2020).

In this article, the method used to present the relationships between rivers and borders is the geographic description. It describes the association among the diverse phenomena existing on the Earth's surface, exploring their location, relationship, and connection with other phenomena (GOMES, 2017). This method has a strong tradition in geographical science. Throughout the geographical thought evolution during the 20th century, the role of description as a research method was left aside due to its association with a form of encyclopedic knowledge and inventory of reality (ZUSMAN, 2014). By describing, we seek to articulate the literature on transboundary water resources governance with the acknowledgment of the shared international waters' current conditions within the Amazon and La Plata river basins.

This article aims to contribute to the understanding of governance of waters shared by Brazil and Bolivia complexity. The relationships between rivers and borders will be organized considering the features of the literature on cooperation and disputes in transboundary basins

(RIBEIRO, SANTOS and SILVA 2019). The first element is related to the geographical situation of the fluvial border, that is, if the transboundary river crosses or constitutes the international boundary. Usually, in crossing boundary rivers, there is a greater risk of the emergence of conflicts since a country located upstream can use the water in its territory in a sovereign way and without consulting the countries located downstream (GLEDITSCH et al., 2006).

The second element relates to the uses of water and its changes throughout time. Empirical data demonstrate a higher risk of conflicts in transboundary rivers affected by significant changes in the quality or quantity of available water, whether due to the construction of a hydroelectric plant or an accident that increases water pollution, for instance. On the other hand, agreements and cooperation initiatives tend to be concentrated on the rivers most valued by States (BROCHMANN and HENSEL, 2011).

The last aspect being analyzed refers to the international treaties and organizations created to govern the waters shared by Brazil and Bolivia. Apparently, treaties and organizations guarantee the conditions for cooperation, but they are not enough to avoid international conflicts (DINAR et al., 2019). In this sense, it is essential to understand the level of institutionalization of the transboundary basin treaty or organization, that is, if it promotes joint efforts such as monitoring the quality and quantity of water or installing conflict resolution mechanisms (ZAWAHRI, 2018).

The article is structured in three parts: the first section presents the conditions for transboundary cooperation and conflicts over water resources in the Amazon River basin. In the context of this river basin, the features of governance will be assessed, such as the following: the conditions for cooperation based on the formation of fluvial boundaries; changes in the use of waters shared by Brazil and Bolivia, highlighting current emerging tensions and, finally, the construction of international organizations responsible for international

cooperation, its potentialities, and limitations. The second section addresses the conditions for cooperation in the Plata river basin, regarding the delimitation of fluvial boundaries during the occupation of the South American interior, the geoeconomic and geopolitical uses of international rivers and, finally, the institutions created to mediate conflicts and organize cooperation in international waters. The third section contains the final considerations, which synthesize the elements presented in the two transboundary basins that benefit water governance based on equity.

AMAZON BASIN

The question of Acre² and the indeterminate demarcation of fluvial boundaries

Amazon's territorial boundaries between Brazil and Bolivia were the subject of intense disputes throughout its delimitation³ process. The Portuguese and Spanish colonial borders were initially delimited by the principle of *uti possidetis*⁴, declared by the Treaty of Madrid (1750), and adjusted by the Treaty of San Ildefonso (1777). Lately, its repeal in 1801 opened the window for a new delimitation process, led by the national states in formation and following new scientific criteria. However, the scattered border population and the distance from the political decision centers left the task unfinished (VERGARA, 2010).

2. The conflict among Brazil, Bolivia and Peru, between 1899 and 1903, regarding the control and occupation of the Brazilian state of Acre territory. Until the signing of the Treaty of Petrópolis, in 1903, this territory belonged to Bolivia (BANDEIRA, 2000).

3. While the term delimitation refers to the establishment and ratification of boundaries through treaties, the demarcation refers to the field interpretation of information recorded during the delimitation, with the construction of landmarks signalling the boundary location.

4. In the context of colonial border disputes, *uti possidetis* was a principle of international law that recognized that the criterion of occupation granted legality and legitimacy to the possession of a territory.

The first boundary treaty between the independent states was signed in 1867 and the Treaty of Ayacucho. This was followed by two demarcation expeditions. They defined the boundaries in the La Plata and the Amazon border segment (along the courses of the Verde, Guaporé, Mamoré, and Madeira rivers). The Amazon River basin rivers had already been partially traversed by previous expeditions; hence, the characteristics of their courses were better known. However, from the mouth of the Mamoré river, the international boundary should assume an astronomical path, *i.e.*, its course should be demarcated along a line drawn between two points with known geographic coordinates: the mouth of the Mamoré River and the headwaters of the Yavarí River. Notably, the delimitation of international borders employing astronomical criteria was applied mainly in less explored regions. Thus, the proposed goal of the third demarcation expedition was to identify the primary headwaters of the Yavarí River, which were unknown (LNCC *s.f.*).

According to the Vergara (2010) study, the Yavarí River has been recognized as the international boundary between Brazil and Bolivia. This river was first defined as the westernmost limit of the Portuguese empire in South America after the signing of the Madrid Treaty. Later, it was considered in the treaties that defined the international limits of the Republic of Brazil. This river was considered the edge of the Portuguese occupation within the Amazon River basin; however, due to its unknown headwaters, it was difficult to demarcate the international boundary between that point and the mouth of the Mamoré river until the beginning of the 20th century.

The region's exploration driver was the Amazon's basin rubber boom and the so-called "question of Acre", which entailed the demarcation of the international boundaries between Brazil and Bolivia. Indeed, from the middle of the XIX century and the beginning of the XX century, the exploitation of the rubber tree - *hevea brasiliensis* – for latex extraction and its use in industrial processes, especially in

the United States and Europe, attracted a large population contingent to the valleys of the Acre, Purus, Madre de Dios, and Yavarí rivers, among others. This population contingent, mostly made up of northeaster Brazilians, shed light on the lack of definition of Brazil – Bolivia international boundaries (BANDEIRA, 2000).

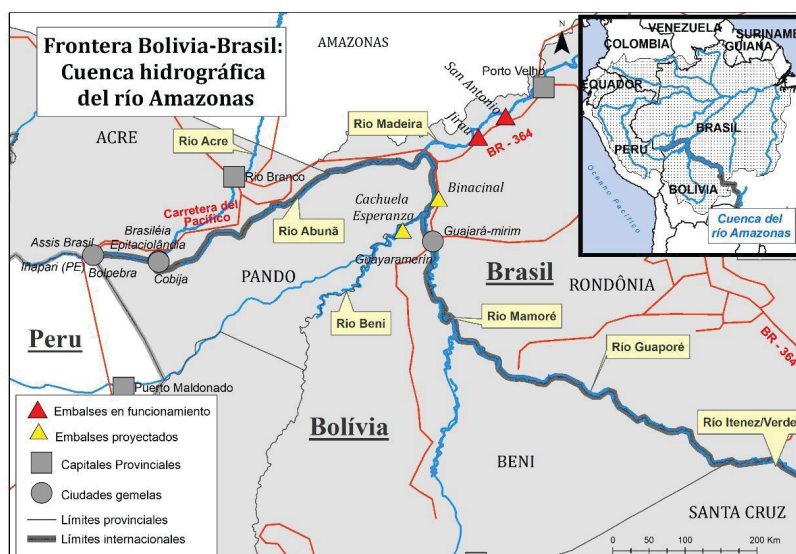
Without going deep into the diplomatic disputes between the two countries, they sent three Brazilian commissions to demarcate this vast territory extension. The seeking for irrefutable boundaries between Brazil and Bolivia evidenced the association between politics, international diplomacy, exploration, and the foundations of scientific demarcation. The expeditions offered information on the characteristics of the human settlements, their economic activities, and the natural conditions of this region. Finally, the Treaty of Petrópolis (1930) resolved the question of Acre. It established a new delimitation and the effective demarcation of the international boundaries between the Mamoré and Yavarí rivers. Instead of astronomical lines, the Abuná and Acre rivers were adopted as fluvial marks separating the two countries. Due to this delimitation, the Mamoré and Abuná became boundary-making rivers, and the use of the water resources demanded coordination between the two neighboring countries.

The agricultural and energy frontier in the Amazon River basin: new demands for water use

Despite mainly being in the Amazon biome, the boundary rivers shared between Brazil and Bolivia in the Amazon basin begin in the Brazilian central plateau. The headwaters of the rivers Itenez/Verde are located in the central Brazilian region, draining into the great Amazonian rivers. Starting in the 1960s, the expansion of the agricultural frontier on the Brazilian side began in the Mato Grosso, and Rondônia states, alongside the international border with Bolivia,

in the segments corresponding to the departments of Santa Cruz and Beni, following the highway BR-364 northward (Figure 2).

Figure 2. Bolivia-Brazil border in the Amazon River basin



Source: authors

Initially, the settlement in this area was carried out by small farmers; however, starting in the 1970s, highly technified, export-oriented, and extensive farms agriculture began to develop, mainly soybean, corn, and sugar cane crops (BECKER et al., 1990). More recently, depending on commodity prices in the international market, productive land converted into pastures, forming what Bernardes (2015) calls the meat-grain commodity chain. This land use has provoked various impacts on the water systems. The widespread use of agrochemicals increased the presence of toxic residues in water samples from artesian wells and surface water (MOREIRA et al., 2012). Consequently, there is concern about the increase in the number of neoplasms (cancer) in the areas with greater agrochemicals (WEIHS et al., 2017).

In addition, due to the expansion of land dedicated to agriculture and grazing, deforestation has increased by 16% and 12% in Mato Grosso and Rondônia states, respectively, in 2019 (INPE, 2020).

On the other hand, the Bolivian border region is one of the most preserved ecotone regions between the Cerrado and the Amazon Forest. The Noel Kempff Mercado National Park, located in the northeast of the Santa Cruz department, is an ecotone between the areas of the central plateau and the Amazonian plains. The Bolivian agricultural front, organized from Santa Cruz de la Sierra, has been incorporating new lands since the 1970s with a significant investment of international capital, including Brazilian, oriented to producing commodities for export (SILVA, 2012; URIOSTE, 2018).

According to the ideas put forward, the border segment between Brazil and Bolivia in the upper course of the Amazon basin presents a significant asymmetry in the territorial organization and few cross-border interactions. On the Brazilian side, the expansion of the agricultural-livestock front created a territorial configuration of greater demographic density, a structured urban network, and a more extensive road network. On the Bolivian side, the occupation is still not dense. Also, areas covered by preserved forest, such as in the Noel Kempff National Park, are proper buffer zones⁵ that hinder cross-border interactions.

Furthermore, from the Mamoré river, the border areas are within the Amazon biome throughout the Brazilian states of Rondônia and Acre, and the Bolivians departments of Beni and Pando. This segment extends until the triple border of Bolivia, Brazil, with Peru. Throughout the 20th century, this region drew little attention from the centres of power, except in two moments: in the already mentioned conflict

5. Buffer zones are those areas considered strategic in which the central State restricts or prohibits access to the border. Reserves and conservation areas are often resorted to this purpose (BRAZIL, 2005).

around the question of Acre and, in the 1980s, when the rubber tapper (*seringueiro*) Chico Mendes stood out internationally in the fight for the preservation of the native forest. More recently, this border zone once again acquired importance due to the investments already made, such as the opening of the Pacific highway (which crosses the territory of the state of Acre and the international border with Peru near the triple border) and for the resumption of hydroelectric plants projects in the Amazonian rivers (in fact, while two hydroelectric plants already are in operation, another two have been projected). (Figure 2) (MACHADO et al., 2014; PIRES DO RIO et al., 2015).

Exploiting the Amazon's rivers to produce hydroelectricity by large plants began in the 2000s when the region's rivers became the last hydroelectric frontier. The energy demand increased in the Brazilian economy during the first decade of the XXth century, and the relatively untapped Amazonian rivers turned the region into a target for this type of project (FEARNSIDE, 2014a; PIRES DO RÍO et al., 2015; EPE, 2017). Although the figures of the previewed hydroelectric plants in the Amazon basin are variable, ecological impacts are expected. In effect, changing the annual seasonal flooding due to the dammed rivers would profoundly alter the water uses and the relationships between communities and water resources, that is, the hydrosocial cycle⁶ (CAVALCANTE et al., 2011; FEARNSIDE, 2014b; TUNDISI et al., 2014; CAVALCANTE and HERRERA, 2017).

Because of its geotectonic diversity, the Madeira River sub-basin is the subject of hydroelectric projects under a state-led consortium between Brazil and Bolivia. Their rivers present either features of plateau rivers, such as significant topographical slopes and rapids, and great flood plains, waterlogged periodically according to the

6. The concept of the hydrosocial cycle is an elaboration from the concept of the hydrological cycle. The hydrosocial cycle incorporates human actions in the flow of water in nature, either through the production of infrastructures, laws or through the symbolic uses of water.

dynamics of water rises in the basin. In the Madeira River, two hydroelectric plants are already in operation, Santo Antonio and Jirau⁷, located in Brazilian territory. However, since 2016 a binational hydroelectric inventory has been developed in the Madeira sub-basin, with the participation of state-led electricity companies (Eletrobrás, Brazil; ENDE, Bolivia) and the Development Bank of Latin America (CAF). (PIRES DO RIO et al., 2015).

In addition to the Santo Antonio and Jirau dams, the construction of two other planned hydroelectric plants, Cachuela Esperanza on the Beni River and a binational hydroelectric plant on the Mamoré River, would constitute the Madeira River Hydroelectric Complex (Figure 2). The Cachuela Esperanza hydroelectric project dates to the 1980s when the Bolivian government conducted the first feasibility studies on the Beni River (LANZA and ARIES, 2011). However, the hydroelectric integration project gained new strength in the 2000s with the Initiative for the Integration of Regional Infrastructure in South America (IIRSA). In 2007, Brazil and Bolivia signed a Memorandum of Understanding on Energy Matters and, in 2016, an Addendum to carry out the necessary inventory studies to build joint electrical interconnection and binational facilities (BINATIONAL INVENTORY, 2021). Moreover, Bolivia agreed to export 7,500 MW to Brazil, 1,500 MW from their binational facilities (EPE, 2017).

In summary, the new territorial processes on Brazil - Bolivia border, especially in the Madeira basin's rivers, are causing salient socio-environmental changes both on the border and throughout the Amazon basin. Expanding border agriculture in the territory of Rondônia and Acre produced changes in the land use pattern of Amazon forests, and rivers. Activities such as chestnut harvesting and latex extraction lost space due to deforestation. This process led to

7. In 2007, the construction of the Santo Antonio and Jirau hydroelectric plants was placed among the priorities of the Brazilian Growth Acceleration Plan (PAC) (FEARNSIDE, 2014a).

conflicts and territorial disputes that marked the 1980s and 1990s. The construction of new infrastructures such as the Pacific Highway and the Madeira River Hydroelectric Complex places this border region at the forefront of South American commodity extractivism. In addition, the water uses for producing energy and promoting economic development shed new light on the different conceptions of using natural resources and the unequal distribution of the socio-environmental effects of such projects. Therefore, the institutions involved in transboundary projects ought to take part in elaborating cooperation mechanisms and mitigating actions to the socio-environmental adverse impact.

OTCA and the MAP Initiative: institutional frameworks on transboundary water resources

The Amazon basin acquires an essential role in the environmental agenda on a global scale (TIGRE, 2019). Its status has consequences on many topics, such as the following: the effects of the Amazon on regulating the global climate; the value of water, biodiversity, and genetic resources; and the preservation of traditional socio-environmental livelihoods. This framework organized environmental governance actions at the national and supranational levels.

Due to international forces demanding the management of the natural resources in the Amazon, Brazil began to forge efforts to institutionalize cooperative mechanisms among the riparian countries. The Amazon Cooperation Treaty (ACT), signed in 1978 but entered into force in 1980, became the framework agreement for multilateral relations on issues such as sustainable development. However, only in the 1990s, with the expansion of discussions on the preservation of the environment, is that the Amazon forest appears as one of the main issues. The ACT created mechanisms for elaborating joint cooperation policies and projects at the watershed scale. The creation

of the Amazon Cooperation Treaty Organization (OTCA), which has been in force since 2002, established the operating conditions to carry out research and development activities between the signatory countries of the ACT (SANT'ANNA, 2013).

Sant'Anna (2013) demonstrated how the governance of water resources in the Amazon basin was implemented from initiatives in its sub-basins. Some outstanding examples, such as the Acre river basin on the border of Brazil, Bolivia, and Peru; and the Napo river basin on the border between Ecuador and Peru, show the distance between the formulation of international governance policies by OTCA and the demands related to the use of water at the local level.

One of the main actions developed to mobilize civil society at a local scale arose in the triple border region between Bolivia, Brazil and Peru at the beginning of the 2000s. That is the MAP Initiative, an acronym made up of the initials of the department of Madre de Dios (Peru), the state of Acre (Brazil) and the department of Pando (Bolivia). This articulation between civil society actors of the three countries originated alongside the construction of the Pacific Highway, which would cross MAP's territory. However, discussions about its possible regional impacts have not preceded its construction. The MAP Initiative, thus, was opposed to the construction of the road and presented itself as a dialogue space for transboundary dwellers (DOUROJEANNI, 2005).

In 2002, confronting the increase in deforestation, burning, expansion of the agricultural frontier, and the effects of a big flood of the Acre River, the MAP Initiative, through the mini-MAP Hydrographic Basins, proposed the creation of the Integrated Management for the Upper Acre River Trinational Basin Program (SANT'ANA, 2008). Through an articulation between local and international NGOs, and projects funded by OTCA, the Global Environment Fund (GEF), and the Program of the United Nations for the Environment (UNEP), strategies were defined to integrate the management of the Acre

river basin. Priority was given to risk management associated with prolonged flooding and drought in the basin. In this way, it was determined three adaptation strategies: i) reducing the vulnerability of communities in the event of hydro-meteorological extremes; ii) protecting and restoring water resources; iii) reducing the imbalance between water supply and demand (OTCA, GEF and UNEP 2014).

The hydrological, forestry, and socioeconomic studies carried out from this initiative contributed to a better understanding of the border area between the three countries. Nevertheless, the most ambitious proposals that pursued establishing a trinational integrated management were unsuccessful. At the same time, the evolution of the projects of infrastructure that affected the border between Brazil and Bolivia, such as the river Madeira and Pacific Highway hydroelectric plants, increased pressure on water and forest resources in this segment of the Amazon rainforest. Then, it can be affirmed that there is still a lack of institutional structures supporting dialogue and the organization of social actors on both sides of the international boundary.

LA PLATA BASIN

The occupation of the border and the importance of the Paraguay River

The occupation of the River Plate fragment that currently corresponds to the international limit between Brazil and Bolivia was linked to the processes of defense of colonial territories against the conflicts between the Iberian Crowns in South America, to the catechization and capture of the indigenous and the discovery of mineral reserves. In particular, the discovery of gold mines in the Cuiabá region at the beginning of the 18th century promoted the establishment of settlements Portuguese military in this area of the

Lusitanian territory of the Americas (VOLPATO, 1987). Front the rapid depletion of the gold mines in Mato Grosso and the isolation from the center Portuguese politician, the population of the areas of the Cuiabá mines began to move towards the west, towards the valleys of the Guaporé and Paraguay rivers, establishing contacts each time stronger with the Spanish settlement nuclei. These, in turn, were already used to exchanging goods with neighboring towns, mostly through smuggling. Thus, on this colonial frontier there were sporadic and intermittent contacts, either by land roads or by hydrographic courses (VOLPATO, 1987; ESSELIN et al., 2012).

The environmental difficulties created by the Pantanal floodplain made the human settlement was a slow and punctual process. The places where cities were settled and towns were generally chosen based on their function of protecting the territory Portuguese colonial. With the application of the principle of *uti possidetis*, these settlements became references for the definitive demarcation of the limit (MACHADO, 2000). Nevertheless, For most of its history, Brazil's border with Bolivia in the Pantanal was described as "empty, unknown, and strongly negative" (FIFER, 1966, 360).

In this way, the settlement of this part of the border had an intermittent character and depended on the interest of the respective central governments to promote their occupation. Is this situation continued throughout the colonial period, until independence. Delimitation agreement between Brazil and Bolivia in the Río de la Plata basin was established with the signing of the Treaty of Petrópolis in 1903. In this same treaty four sovereign accesses were agreed from Bolivia to the Paraguay River through the Guaíba, Mandioré and Cáceres lagoons, and the confluence of the Negro River with Paraguay. However, access to lakes in Bolivian territory depends of the level of the Paraguay River and its channels, since the navigability in this system depends to the actuality of the Pantanal floods (Figure 3a). In addition, the only access equipped with infrastructure for river

navigation is located on the shores of the Cáceres lagoon, where the Bolivian cities of Puerto Suárez and Puerto Quijarro are located, connected to the Paraguay River by the Tamengo channel. It should be noted that, on the Brazilian side, on the banks of the Paraguay River, there is the city of Corumbá (Figure 3b) (FIFER, 1966).

The foundation of the towns in the border area occurred in different periods, and they are related to the defense functions of the border. Thus, the foundation of the town of Corumbá occurred in the year 1778 with the name of Albuquerque. She was the result of an expedition organized by the governor of the province of Mato Grosso, Luiz Albuquerque de Mello Pereira e Cáceres, who in this same expedition founded Fort Coímbra (1775) and the town of Villa María (1778, current CÁCERES) (MANETTA, 2009; ESSELIN et al., 2012). On the other side of the international boundary, the town of Puerto Suárez was created recently in 1875 on the shores of the Cáceres lagoon, becoming the main river port of Bolivia. However, due to the difficulties of navigating the Tamengo channel, Approximately 6 kilometers long, most of the manufactured products that arrived through the Paraguay River and headed for the Bolivian market used the port of Corumbá and then continued to Bolivia by land. The town of Puerto Suárez remained relatively stagnant until the 1950s, when the Eastern Railway was created. So much Thus, while in the 1960s the city of Puerto Suarez had around 2,000 inhabitants, the city of Corumbá reached approximately 30,000 inhabitants (FIFER, 1966).

The population difference between Corumbá and Puerto Suárez was maintained during the apogee of fluvial navigation in the Paraguay River between the final half of the 19th century and the beginning of the XX. During this period the river port of Corumbá was the main supply center of foodstuffs and consumer goods for a vast region that encompassed the entire the province of Mato Grosso, limited to the north by the towns of Cuiabá, Poconé and Cáceres; to the east through the towns of Aquidauana and Miranda, and west through eastern

Bolivia to the outskirts of Santa Cruz de la Sierra. Also, Corumbá was the main exit door of the regional production of dried meat, leather, wood and yerba mate (QUEIROZ, 2004; MANETTA, 2009). With the exception of the entrance to the west by land, these longitudinal connections through the extensive fluvial network of the Paraguay River hydrographic basin required traveling long distances in adverse navigation conditions, these depended on the seasonal period and the flow of the Pantanal rivers. It should also be noted that the flows commercial information and orders from the central government in Rio de Janeiro respected the orientation of the hydrographic basin, therefore, all of them had to pass through the ports from Montevideo or Buenos Aires before reaching the border area (QUEIROZ, 2004).

The geoeconomic uses of the Paraguay River for Bolivia and Brazil

The fluvial length of the international boundary shared by Bolivia and Brazil is just 48 kilometres on the Paraguay River. However, despite its shortness, this boundary is geopolitically and geoeconomically salient for Bolivia (Figure 3a). These 48 kilometers represent the most considerable extension of sovereign and navigable exit from Bolivia towards the ocean. The river navigation promoted the occupation and exploitation of the Pantanal region. However, the incentive for road transport by the construction of highways diminished the importance of river transport in the Pantanal rivers between the 1950s and 1970s. Notwithstanding, in the 1980s, the rapprochement between Brazil and Argentina, the increase in the oil price, and the expansion of the agricultural frontier in the interior of the South American continent revalued river transport, and the Paraguay-Paraná Waterway (HPP) project became considered not only an alternative to comply with the needs of commodity's exports but also as a strategic tool for regional economic integration (ZUGAIB, 2006).

3b: Diagram of the ports and hydrographic network in the twin cities of Corumbá, Brazil, and Puerto Quijarro / Puerto Suárez, Bolivia.



Source: ABIRH, 2008

Due to the possible sovereign access to the sea, Bolivia became one of the most active countries in the discussions and activities related to the HPP project. One of the main topics of interest to the Bolivian government and transport companies is the navigability maintenance at the Tamengo channel (Figure 3b). However, given that the most considerable portion of the canal is located in Brazilian territory, the execution of maintenance works and the regulations for its navigation is the responsibility of Brazilian authorities, such as the Paraguayan Waterway Administration (AHIPAR). While AHIPAR, accountable for the execution of works, is institutionally connected to the Brazilian National Department of Infrastructure and Transportation (DNIT), the Pantanal's Captaincy is linked to the Brazilian Navy and oversees establishing regulations and supervising navigation (SILVA, 2012).

Stakeholders' relations seem to be of cooperation and understanding between both countries. In fact, in 2004, the Mixed Technical

Commission Brazil - Bolivia (ZUGAIB, 2006). Representatives of both countries constantly exchange information regarding the waterway navigability (SILVA, 2012).

The search for solutions to the Bolivian landlocked-led logistics problems generated various alternatives, but none are feasible in the short term. So far, the sovereign ports of Bolivia use terminals located in the city of Puerto Quijarro⁸. Still the vessel's volume and the number of ships in transit are subject to variations in the Tamen-go channel. One possibility to enhance those port connections is to modernize a railway line that joins Bolivia to the Brazilian city of Ladário, located on the banks of the Paraguay River. This alternative would require flexibility in customs regulations for the transshipment of Bolivian commodities through Brazil. While this issue has been discussed between national governments and carriers' logistics in both countries, there is still no foreseeable conclusion (Figure 3b). Another possibility would be to improve road infrastructure to the military settlement of Puerto Busch. In this case, the goods would be transported by land within Bolivian territory and shipped directly into the main waterway channel (Figure 3a).

From the Brazilian point of view, the HPP was considered an alternative to transporting agricultural products from the Centre-West, especially that from the state of Mato Grosso (ZUGAIB, 2006). However, this region which is currently the largest producer of agricultural commodities in the country, transports its cargo using land routes to reach the Atlantic ports or the Amazon basin, using the ports of Porto Velho and Itacoatiara, located in Rondônia and Amazonas, respectively. 84% of the cargo shipped in Corumbá through the waterway corresponds to iron ores destined for the Argentine market (ANTAQ, 2018), thus generating a strictly regional transport network.

8. The terminals located in Puerto Quijarro are: Puerto Aguirre, Gravetal and Puerto Jennefer.

However, several operational difficulties hinder the use of HPP competitively by Bolivia and Brazil. These include, first, the need for constant dredging of the Tamengo channel in atypical periods of drought and the limitation of the size of the convoys that can navigate on the track. This last factor is an imposition of the Brazilian Navy, justified by security issues and by the possibility that navigation in the canal affects the water supply of the city of Corumbá (Figure 3b). Secondly, the waterway crosses the Pantanal wetlands in the initial section between Cáceres and Corumbá. Variations in the river level in this area make navigation difficult and works such as the expansion, rectification, and channel dredging are limited to preserve environmental conditions (Figure 3a). Despite all these operational difficulties and logistical competition, the HPP presents a geo-economic potential for this region. It offers an alternative to not only the commodity flows but also a geopolitical alternative since it could guarantee an autonomous exit for Bolivia until the Atlantic Ocean.

The institutional framework of the La Plata River basin and the environmental threats at the Pantanal floodplain

La Plata River basin is South America's second-largest hydrographic system, shared by Brazil, Argentina, Paraguay, Uruguay, and Bolivia. It comprises an area of 3.1 million km². The so-called La Plata Basin encompasses three large hydrographic basins: Paraná, with 1.5 million km²; Paraguay, with 1.09 million km²; and Uruguay, with 365 thousand km². These three hydrographic basins converge in the estuary of the La Plata River, which is located on the border between Uruguay and Argentina and drains an area of 130 thousand km² (ESPÍNDOLA and RIBEIRO, 2020).

While Brazil contains most of this large hydrographic system (46% of the total), Argentina owns 28% of its area, Paraguay 13%, and the remaining 13% is divided between Uruguay and Bolivia. Also in Brazil are the located the sources of those three rivers.

The beginning of hydropolitical cooperation between La Plata's countries happened between the 1960s and 1970s, when international organizations, such as the Organization of American States (OAS), the Inter-American Development Bank (IADB), and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) fostered the establishment of a regional agreement. The outcome of the negotiations was the signing of the Treaty of La Plata River Basin in 1969. This treaty established the foundations for using shared resources and developing regional infrastructure projects, mainly those oriented to producing hydroelectricity and river navigation. Although the treaty did not halt conflicts among countries⁹, it created an arena for dialogue to develop the river basin's water potential (VILLAR et al., 2018; SILVA and HUSSEIN, 2019; ESPÍNDOLA and RIBEIRO, 2020).

Finally, the Intergovernmental Coordinating Commission of the La Plata Basin Countries (CIC Plata) and the Financial Fund for the Development of the River Plate Basin (FONPLATA) are two fundamental institutions for the articulation of cooperative policies in the different administrative and hierarchical spheres of the river basin (ESPÍNDOLA and RIBEIRO, 2020). While CIC Plata was created before the formulation and approval of the treaty and turns out to be responsible for the formulation and execution of joint projects, FONPLATA, built in 1976, oversees the financing of most of those projects. To this end, FONPLATA counts on the contributions made by La Plata's countries and the funds raised at other international institutions (SILVA and HUSSEIN, 2019).

9. Previous conflicts in La Plata had different origins and developed in different sections of the basin. Some of the most salient were: on the construction of hydroelectric plants (Itaipu and Yaciretá) on the Paraná River, between the 1960s and 1970s, which involved Argentina, Brazil, and Paraguay (RIBEIRO, 2017); disputes over the installation of paper mill industries on the banks of the Uruguay River, between Argentina and Uruguay, at the beginning of the 2000s (GEARY, 2012); and the contamination of the Pilcomayo river basin, shared by Argentina, Bolivia and Paraguay (ESPÍNDOLA and RIBEIRO, 2020).

Until the middle of the 20th century, the most significant projects installed in the river basin followed the international tendencies toward using the maximum water resources for economic development. In this sense, national governments with funds from various agencies and international development banks, such as the World Bank and the IADB joined forces to build large hydroelectric plants, waterways, irrigation systems, and ports, among other infrastructures, causing strong environmental and social impacts throughout the watershed (SILVA and HUSSEIN, *ibid.*).

The border region of Brazil and Bolivia have situated the waterway that threatens the conservation of environmental conditions at the headwaters of the Paraguay River and the Pantanal. The interconnection between the sources on the plateau and the periodic flooding of the Pantanal on the plain are essential for maintaining the entire basin's hydrological and ecological conditions, affecting the flow of rivers, the viability of hydroelectric production, and navigation. The affected area is the Upper Paraguay Basin (UPB) (WWF-Brazil *et al*, 2017).

Currently, in the central Brazilian plateau, where Paraguay River's headwaters are located, and outside the Pantanal floodplain, a constant expansion of agribusiness is taking place with the monocultures of soy, corn, rice, and sugar cane. The advance of agribusiness in the central Brazilian plateau has increased soil erosion, causing the sedimentation of important tributaries of the Paraguay River in the Pantanal. WWF-Brazil data (*ibid.*) shows that 54% of the CAP area was altered, with the prominent coverage by pastures (33.5%). On the other hand, in the plain area, 82% of the land cover remains to present natural characteristics, with forests and natural pastures. In 2020, this region was devastated by fires caused by burning grass in agricultural areas affecting large extensions of native forests. This form of management, associated with livestock production around and inside the Pantanal plain, affects not only the land cover but also the biodiversity of the Pantanal.

The description of the La Plata basin shows that the existing institutional international cooperation agreements on the border between Brazil and Bolivia privilege transportation and logistics issues. Despite the threats to which the Pantanal biome is exposed, the absence of institutional mechanisms that articulate the environmental policies of the five countries is a weakness whose effects go beyond the border between Brazil and Bolivia; they extend throughout the hydrographic basin. The expansion of agribusiness reaches areas of Brazil, Bolivia, Paraguay, and Argentina. Thus, the harmful effects on the Paraguay River and the Pantanal, a natural heritage of humanity, are extended towards productive areas along the watershed. It is considered that joint efforts between Brazil and Bolivia would at least make it possible to preserve this border region of great importance for both countries.

Conclusions

The objective of this article was to analyze the transboundary water resources governance potentialities and weaknesses on an equitable basis between Brazil and Bolivia. At the time of the South American boundary demarcation (in the case of Brazil and Bolivia, at the beginning of the 20th century), rivers were adopted as landscape marks. However, throughout the XX century, with the process of occupation in both countries, the boundary rivers became a source of natural resources for national economic development. Due to this reason, the Nation-states were instigated to develop cooperation instruments around shared water resources.

In the Amazon River Basin, cooperative initiatives were forged using national articulations that still constrain the implementation of measures aiming at joint actions at the border locations, as demonstrated by the MAP's case. In addition, during the last fifteen years, South American regional integration and economic development

policies in Brazil and Bolivia turned this border zone and its rivers into a critical target in searching for using water resources. The construction of hydroelectric plants along the Madeira River and its tributaries have caused concern about possible impacts on the entire river basin. Therefore, most of the population affected by the construction of the hydroelectric plants is in the localities directly affected by the dam, notwithstanding the ecological and hydrological impacts that affect the entire natural system. Faced with this situation, the integration between regional and local levels is increasingly necessary.

In the La Plata basin, the intense use of water resources occurred earlier than in the Amazon basin. Urbanization and the expansion of agribusiness into the Brazilian Central Plateau incorporated the waters of the La Plata rivers in the development processes. Large hydroelectric plants and agribusiness are examples of the logic of maximum use of water resources for economic development. They are now a threat to the environmental balance in the UPB.

From the two cases described, it can be assessed that cooperation initiatives have been few, have broad objectives and aim to ensure development by promoting navigation or energy productivity improvements. This framework presents national states as fundamental actors in articulating institutionalized cooperative organizations. The exercise of state sovereignty in border rivers is made effective through the construction of infrastructures that seek to share water resources for economic development but that do not offer alternatives for the mitigation of the negative effects produced by the works already carried out, such as the San Antonio and Jirau hydroelectric plants. Projects aimed at using water resources, such as improvements to guarantee the navigation of the HPP or the construction of the hydroelectric plants of the Madeira River, take place in ecosystems that present a high environment sensitive such as the Pantanal and the Amazon. However, so far, binational cooperation has only been oriented to guarantee the execution of these infrastructure works.

Finally, it is concluded that transboundary governance built on equitable bases must pay attention to the socio-environmental effects of economic development projects located at the border. Neighboring countries also share the unfolding of environmental degradation, so they need to be taken into account by the organizations in charge of the governance of transboundary river basins. This demand must be considered a prevention strategy for future socio-environmental conflicts that may emerge on the border between Brazil and Bolivia.

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THE RIVERS ON THE BORDER OF BRAZIL¹

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Introduction

Defined by the mathematician Blaise Pascal (1623-1662) as “paths that march on themselves”, rivers have a formidable historical meaning for humanity due to its primordial quality of being a source of water supply. Moreover, throughout history, rivers have served to penetrate inside the continents towards territorial conquest and later as defining borders between modern nation-states.

This article aims to demonstrate the geopolitical meaning that this “natural element” can exert on the relations established between national states in determining the most diverse uses provided by rivers. In this sense, the article is divided two parts, where in the first we will present the general aspects related to watercourses of great extension

1. This text was originally published in: Os Rios na Fronteira do Brasil. **Revista Con-hecer: Debate entre o Público e o Privado**, 12(29), 2022, p. 55–73. Disponível em: <https://doi.org/10.32335/2238-0426.2022.12.29.8344>

and how this ends up constituting geopolitical meaning from natural, historical, political, economic and social circumstances. In the second part, we will explore particular aspects of some rivers that are on the border of Brazil with other countries and how they were part of the process of delimiting the Brazilian borders.

The use of classical political geography, as well as the field of history, gave us better tools to understand the meaning of rivers for diverse societies: it can represent a source of water for consumption and irrigation; navigation can symbolize the most important element in enabling trade practices; the river can also mean an explicit division between territorial domains, separating people by riverbanks or when it cuts or crosses different communities. This endorses the particularity of borders, since, as a rule, each side has its own history, and therefore represents dissensions.

Exploring Itamaraty's website was instrumental in identifying river segments functioning as borders between Brazil and other countries; after that, GOOGLE EARTH was used to verify, on the local scale, sundry forms of occupation. We took as reference some published works on border formation, their typologies, and their diverse functions in society. The previous research of the authors, funded by the Brazilian government, was carried out in the tri-border area between Brazil, Peru, and Colombia, which allowed us to observe different uses of the border water of the Solimões-Amazonas River; subsequently, another funding agency enables us to work in the Amazonian border areas between Brazil and Bolivia, specifically in Mamoré and Madeira rivers. Finally, we work with all the rivers participating in the definition of Brazilian boundaries, regardless of their extension as a border and social meaning, because some of the border regions frequently are ignored in most cartographic representations².

2. We excluded the Traíra River, in the far north of the Amazon and the Apa/Estrela River, on the border between Brazil and Paraguay, due to the little expression of social use.

Making Geopolitical Sense Of Rivers

Three important uses that can be defined for rivers – water as a resource, navigation, and border – should be singled out from the beginning, all of them with immense potential for geopolitical reflection. In this piece of work, however, we are more focused on their defining-border quality. At the same time, it is important to remember that river borders have, in the past, been seen more as a zone than as a line. As zones, it means a set of arrangements composed of flows, institutions, and man-made objects, as lines, it is essentially characterized by landmarks or delimitations of boundaries. The point is, therefore, the precision of the limits that are required in nation-state building.

First, it should be pointed out that rivers and river basins have existed longer than national states. At the same time, a river basin constitutes a ‘spatial set’, often used as a basis for territorial planning on a local or regional scale. When these basins have an international reach, there is a need for cooperation between the States that share it, what some authors call ‘hydro-diplomacy’ (RICHARD, 2020). By this, we mean that before the constitution of State-related political networks (another ‘spatial set’), there were hydrographic networks whose limits were defined by the very process of relief formation. The political networks of nation-states overlap the hydrographic one and, in defining limits, end up using rivers themselves as a limit, coinciding with their borders, or ends up cutting rivers into segments, causing their course to be shared among different states. These two cases are found throughout the world, and there are at least 200 river systems that pass through several countries with dealing with conflicts due to the intense use of water resources (FERREIRA, 2017)

These situations led nation states to set up agreements, that is, to establish treaties or general principles for the use of waterways. The course of a river came to be called *successive* when it crosses several national states, and it is mandatory the mentioned-before

international arrangements regulating navigation between them. But in addition to navigation, other forms of use of navigable rivers are practiced: water supply, irrigation, fishing, etc. Although the Amazon basin is for the most part in Brazilian territory, numerous rivers have their sources outside the country: Mamoré, Abunã, Purus, Juruá, Solimões, Iça, Japurá, Negro. This means that cross-border uses can modify the use of water downstream of the boundary line.

The other form of use of rivers as borders is named *contiguous* rivers. In this case, we have nation-states being divided by rivers, hence with each bank belonging to different a state. Unlike successive rivers, regulated by multilateral agreements between states that are crossed by these rivers, contiguous ones require bilateral accords. However, this does not mean that the regulatory issue is smaller in the latter.

One further point worth mentioning to understand rivers as a geopolitical object is the control that States exercise over their mouths or source. The upstream or downstream can be localized in different nation-states and therefore exposed to relationships that may range from solidarity and cooperation to conflicts and disputes, whether for navigation or water-supplying systems. The control over the mouth guarantees access to the continental part, and it is more effective when States keep in possession of both banks. But when the river mouth is shared between two states, agreements are the most prudent way to allow vessels, whether from both countries and third parties, to circulate. In South America, the examples are the mouth of the Amazon, controlled since the colonial period by the Portuguese and its fortifications on both banks: Belém and Macapá. Today it is exclusively under Brazilian rule. At the mouth of the Río de la Plata, on the contrary, the controlling legal acts are shared by Argentina and Uruguay.

In the areas where springs are located, usually higher lands, the problem raised is associated with the control of waters that flow to the lowlands and the quality of it. Claval (2010, p. 39) states that the “upstream determines the volume and regime of waters flowing to

downstream”, and highlights that the latter relies heavily upon the former because it is the amount of rainfall that precipitates at the headwaters of rivers that determines the volume of downstream rivers. When it comes to navigation, landlocked nation-states, that is, those that cannot proceed to sea, may depend on countries that control the mouth. The access to the Amazonian downgrade of Peru and Colombia is made through the Amazon River (NOGUEIRA, 1999). Adding the phenomena of irrigation, urbanization and industrialization, and the construction of dams for water accumulation or energy generation, it is possible to foresee potential flashpoints for conflicts over the downstream-upstream regime between two different countries. This is mainly because of the decreasing water flow due to the intense irrigation practices or for building dams, or even due to the waste dumped by industry, mining, or residential use³. It is similar to what has been called “water wars”, a name that was given to the grave disputes taking place in the aridest regions of the planet such as the Middle East over the Jordan and Euphrates rivers (VENTURI, 2016). In the same way, it is believed that it is urgent to manage trans-boundary waters (RIBEIRO, 2016).

In addition to these geographical references that we point out – source/upstream, mouth/downstream – which can receive geopolitical significance when defining nation-state limits, there are at least two others that should be mentioned: islands and thalweg. Both can pose many types of problems for nation-states that share their riverbanks (SCHRÖTER, 1992). When a riverbed is consolidated and its banks don’t have undergone a number of changes, keeping low quantities of sediment, problems raised from the clear definition of thalwegs, as a dividing line, can be resolved relatively simply; similarly, islands that are within the thalweg line will belong respectively to the border countries. The big question comes to the fore when the rivers

3. Private control of supply can generate conflicts, such as the “water war” in Bolivia.

of recent formation do not have their bed defined and the thalweg changes periodically, which may cause islands to be either right- or left-side of the thalweg, causing problems of ownership to countries.

However, riverbeds are not naturally defined, which can lead to conflicts, especially when there is occupation and land use of these islands by the population on each side of the riverbank. The natural processes of erosion or deposition change the line of the thalweg and the territorial extension of islands, which can be enlarged under deposition, or reduced when there is erosion, or the island can be divided by the opening of channels. In the Amazon basin, whose sedimentary formation reveals that rivers do not have their riverbeds naturally defined, there are reports of municipal- and even international-scale disputes by river-dwelling populations for islands. In the latter case, both Carneiro (2009) and Silva (2018) denounce how grave these changes can be.

Used for centuries as a border between different peoples and later to separate national states, rivers, in fact, rivers ambiguously are both a frontier and an integration link, whether contiguous or successive. Boundary studies in Political Geography began with the search for a 'typology', starting initially looking for its origin, whether it is natural or man-made, and secondly creating new typologies incorporating notions of similarities and differences between the two sides of the border. While mountains would have a more defense-oriented character, rivers would be more integration-oriented. In any case, the strict sense of natural frontier disappears because choices and demarcations are human work. These debates range from the classic period of Geography, with Ratzel and Vallaux (COSTA, 1991), to the most recent days, with works by Foucher (1991), Raffestin (1993), Martin (1997), for instance.

Foucher (1991) gave us an answer to the question of borders pointing out that we are dealing with elementary and linear spatial structures, whose function of establishing political discontinuity is

based on three records: the real (the limit of sovereignty), the symbolic (belonging to a political community), and the imaginary (in the relationship with an Other) (FOUCHER, 1991, p.38) In this sense, borders are a special type of “skin” to the countries, it is at the same time a line of separation and contact. Foucher argues that its analysis must be carried out at different scales, that is, the segments of dyads may hold particularities due to historical or geographical differences.

Historian Lucien Febvre (1878-1956), in turn, certainly had already realized these last statements when working with the Rhine River, sharing with geographer Albert Demangeon (1872-1940) the responsibility to affirm that the Rhine was not a German river, but rather European. They stated that there is⁴, indeed, “a Rhine, in total, if it is a matter of unification; but there are multiple Rhines if it is necessary to create limits or struggle. Rhines which sometimes are gathered, and sometimes are dissociated” (2000, p. 83). In the cities along Rhine’s banks, known as Rhenish cities, the river played its role of uniting, preventing dividing people: “The role of a river that simultaneously divides – because it is wide, deep, with its current, and a moat – and gathers – because it is an obstacle-free route, animated by its own descending fast-pace, a road. About the course of a river, however, Febvre states that this would not happen by chance: “But it does not gather inevitably; it is up to men to consolidate or reject this union. It does not necessarily divide people are free to cross from one riverbank to another, to use low-lying wetlands, sandbanks, natural ice bridges or man-made ones (2000, p. 175). Finally, by highlighting the Rhine River as a border, Febvre elaborates a realistic concept, considering social structures that develop or disappear in the process of border formation, as well as the emotional relations within borderlands:

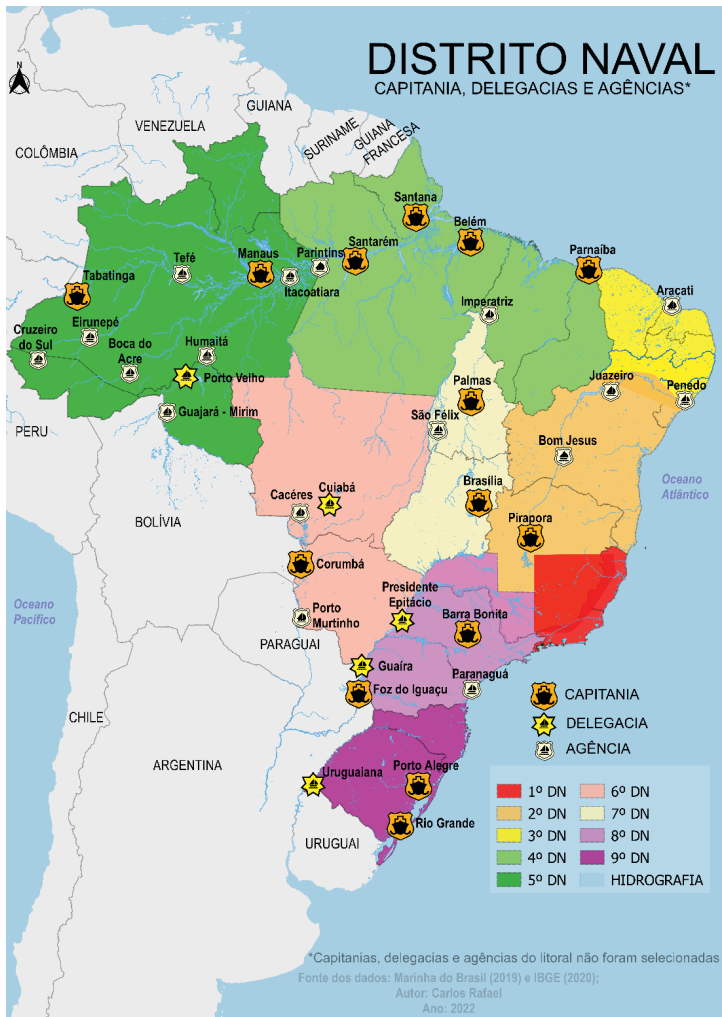
4. Such an assertion in the 1930s was a provocation for Germany.

(...) there is no border when two dynasts, established in lands they explore, divide the expenses to raise some painted fences with their weaponry along a field or draw an idealistic separation line in the middle of a river. There is a border when, beyond this line, we find ourselves facing a different world, a complex of ideas, feelings, and enthusiasms that surprise and disconcert foreigners. It is not police forces responsible to lay the foundation of borderlands, neither customs nor cannons mounted behind the wall. Feelings, that is; exalted passions – and hatred (...) (FEBVRE, 2000, p.212)

This discussion is very attached to the purpose of this article, in the particular case of Brazilian border rivers, since it was identified the need to segment these rivers into small-scale sections for better understanding. Such segmentation is not that of hydrography studies (high, medium, and low course), but a segmentation to show the importance of scale, to demonstrate, for example, that local-level events differ when observed at the regional, national, or international scale. Especially in the case of planning public policies for these areas, is more common to find the national and international spheres being the target of this elaboration.

We conclude this item by pointing out that border rivers of Brazil are under Brazilian Navy surveillance and navigation control. Regarding the defense of these river border areas, the map below shows the performance of the Brazilian Navy, which segments the Brazilian territory into Districts, Captaincies, Police Stations, and River Agencies in those rivers with a higher density of uses. Splitting its personnel and naval equipment in accordance with the Brazilian huge coastline and hydrographic network, the Navy and its military organizations have the self-aligning function of border surveillance and guaranteeing navigation of vessels circulating throughout successive or contiguous rivers.

Figure 1. Regionalization of Naval Districts in Brazil

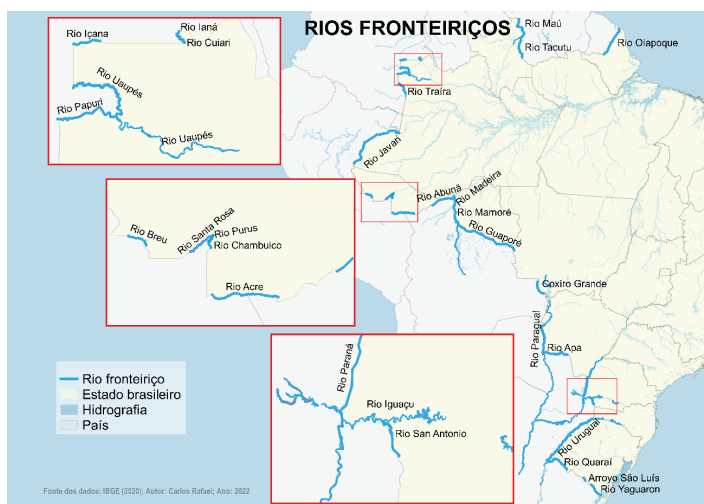


The Rivers On The Border Of Brazil

The Brazilian border is more than 15,000 kilometers, a line that begins at the mouth of the Oiapoque river and ends in a small river called Arroyo Chui. Along this extensive line are several types of border demarcation: rivers, mountains, astronomical lines that cut

through the most varied forms of vegetation and pairs of big and small border cities. We focus here only on rivers that are defined as borders. We will make a more general description of them for subsequent detailing of the most relevant courses, since we find rivers ranging different extensions and volume of water, engulfing different population densities at their riverbanks with particular social dynamics throughout the “Brazilian-border arch”. We will use the segmentation of the extensive Brazilian border defined in the document of the Ministry of Regional Integration entitled PDFF (Programa de Desenvolvimento da Fronteira (BRAZIL, 2009), which divides into three major arches: Arco Norte (from the Oiapoque river to the Abunã river, in Plácido de Castro-AC), Arco Central (from the mouth of the Abunã river with the Madeira river to the Paraná river, on the border of the state of Mato Grosso do Sul with Paraná) and Arco Sul (from the Paraná river to the Chui stream, in the state of Rio Grande do Sul), to organize the exposure of the rivers, starting with the rivers of the North arc and ending with the rivers of the South arc. Figure 2 shows the border rivers of Brazil.

Figure 2. Border rivers



Oiapoque River

Rivers and canals occupy 427 kilometers of the total length of 730 kilometers from Brazil's border with the French Overseas Department of Guyana, of which the Oiapoque river contiguously runs about 350 kilometers, and it is complemented by another 303 kilometers of watershed represented by Serra do Tumucumaque⁵. However, only the last 50 kilometers are used by the population of both countries to supply water, fishing, and navigation, because is where the settlements of North Cleveland, Oiapoque and Saint-Georges de l'Oyapock are found.

Backing in the 19th century, France competed for the occupation of this region, trying to dominate the area bordering the Araguari River, over 400 kilometers south of Oiapoque's mouth. The occupation of this area, with North Cape Captaincy as a landmark, enable the discovery of gold by prospectors in the 1890s (ROMANI, 2013). From there, the gold rush led to a migration from Belém and Maranhão to this region. Three decades later, the Brazilian State created the military detachment of Northern Cleveland. The municipality of Oiapoque was created only in the 1940s. The bridge that was built between the two cities to strengthen border cooperation (SILVA, 2013) almost exclusively records the flow of people toward Brazil. In the opposite direction, that is, joining the European Union, the barriers imposed by the demands discourage the expansion of the flow.

Tacutu and Maú Rivers

The total length of Brazil's border with the Republic of Guyana reaches 1,606 kilometers of which 908 run over the watershed and 698 are over the courses of the Tacutu and Maú rivers. The Tacutu River,

5. See more at: <http://pcdl.itamaraty.gov.br/pt-br/franca.xml>

which has springs in the Tumucumaque Mountains, runs south-north oriented, meeting the Maú River which flows on an opposite route and has its springs on Mount Roraima. Both are located in inhabited regions by a number of indigenous nations such as Ingaritó, Patamona, Taurepang, Uapixana, and Macuxi, making up Raposa Serra do Sol and indigenous land. Historical conflicts were recorded in this area, either by irregular occupations of extraction activities or the occupation of farmers, both having derived from the Amazonian colonization process carried out in the early twentieth century⁶ (SOUZA, 2016). The Tacutu river runs across the city of Bonfim, on the Brazilian side and Lethem on the opposite bank. These cities are connected by a bridge without movement restrictions.

Navigation is practiced essentially at the local level, with crossings or private boats for boat trips and canoes aimed at fishing. Back in 1778, when Portuguese colonization-built São Joaquim do Rio Branco Fort, at the encounter of Tacutu's mouth with the Uraricoera river, for controlling circulation in this area, some routes were opened by the natural fields.

At this time, this area must rely on territorial policies focused on nature conservation and preservation actions. They should also involve various social groups living in that area, from indigenous people to the urban and rural populations that intend to develop productive activities. To enable public policies in this borderland it is required to emphasize local solidarity, as both locations are far from the central areas of their respective countries.

Rio Javari

Extending over 1,200 kilometers, the Javari River is entirely a contiguous river, and it defines the border between Brazil and Peru. Its

6. It should be mentioned that the state of Roraima was part of the state of Amazonas until 1943.

source is located in the watershed of Serra da Contamana, and it runs eastwards towards Brazil and westward to the Peruvian river of Ucaiáli. The valley of the Javari River is all-occupied by indigenous ethnic groups - Korubo, Matis, Kulina, Marubo, Kanamari - but in small points, one can find border guards of the Brazilian Army, especially in Palmeiras do Javari, in the middle reach of the river and in Estirão do Ecuador, about 200 kilometers from the mouth. Its mouth, on the Solimões River, houses the cities of Atalaia do Norte and Benjamin Constant, very close to the urban agglomeration of Tabatinga and the Colombian city of Leticia. This region is a junction point, a tri-border between Peru, Colombia, and Brazil, which gathers several institutions of the three national states and represents the ending point for cargo ships and boat passengers leaving the Peruvian cities of Nauta and Iquitos, as well as the boats leaving Manaus for Tabatinga. It has two international airports: one in the city of Tabatinga (Brazil), and another in the city of Leticia (Colombia), distanced six kilometers from each other. The visit from Everardo Backheuser to this area, in the 1930s, made him name it “*punctu dolens*”, that is, a geopolitical inflection point (NOGUEIRA, 2007).

This border region has received, for some decades now, some proposals for a territorial division of the State of Amazonas, defined by analysts as a ‘geographical monstrosity’⁷. The intention would be the creation of the “Territory of Solimões”, whose capital would be precisely the city of Tabatinga. The oldest proposal is by Samuel Benchimol, from the 1960s, and since the 1990s has become the political ‘flagship’ for local candidates. Considering the speeches around proposals for this region, the arguments referring to poverty, abandonment of the area, and consolidated wealth and prosperity, are at the base of divisiveness discourses.

7. This term initially appears in Lysias Rodrigues.

Abunã River and Guaporé River

The Abunã River, extending over 400 kilometers in length, has its sources in Bolivian territory and borders Brazil from the city of Plácido de Castro, in Acre, around 220 kilometers distant to its mouth in Abunã, and ends at the Madeira River. It has a strong twisty route throughout its course, with low human occupation. The BR-364 highway, which connects Porto Velho to Rio Branco, runs parallel to this river.

The Guaporé River, on the other hand, is much longer. It has more than 1700 kilometers and is born in Chapada dos Parecis (MT). In its high course, crossing the State of Mato Grosso, it is surrounded by intensive agriculture, flowing into the Mamoré River that, in turn, originates the Madeira River. The Guaporé River, as a contiguous river, borders Bolivia for about 1,000 kilometers and has the same length as the navigable riverbed. It was through this river that the bandeirante Raposo Tavares in the seventeenth century, leaving the Captaincy of São Vicente, managed to reach the city of Belém. The process of colonization of the State of Rondônia has advanced to the banks of this river, where the Forte Príncipe da Beira and the city of Costa Marques are located. From that point until reaching the waterfalls found in the cities of Guayaramerim (Bolivia) and Guajará-Mirim (Brazil), the Guaporé river allows navigation, although the low density of people in that area. At this point where navigation is interrupted, the Madeira-Mamoré Railway was built, back in the nineteenth century, a 350-kilometers railroad running to the city of Porto Velho aimed at draining the rubber production of Bolivian rubber plantations. However, by the time it was completed, the rubber extraction 'outbreak' had already run out, but it continued transporting passengers until the mid-1970s when it finally stopped working.

Bolivia uses this river to transport fuel from the city of Trinidad to the border with Brazil, in the city of Guayaramerim (OLIVEIRA

NETO *et al*, 2020). There is also circulation of small passenger boats and tourism and those that cross between border cities. The construction of bridges only takes place in integration projects.

Paraguay River

This river has more than 2,500 kilometers and its source is in Brazil, in the State of Mato Grosso, about 200 kilometers north of the city of Cuiabá. Its high course is surrounded by intensive agricultural production and the upper segment irrigates the wetland region along with other rivers. It borders Bolivia only on a small part of 47 kilometers downstream of the city of Corumbá; with Paraguay, it covers an extension of 200 kilometers and enters Paraguayan territory from this point, running along a small part representing the border between Paraguay and Argentina, and ends in the Paraná River, close to the city of Corrientes. Thus, the successiveness of this river that crosses four countries is perceived.

The construction of Fort Coimbra by the Portuguese in 1775, on the right bank of the Paraguay River, downstream of the city of Corumbá, held the function of controlling access to the continent's interior. Only in 1856 that these constraining practices in navigation end, after an agreement between Brazil and Paraguay. Navigation had, in Corumbá, an important point of support: in the upstream segment, regular navigation reached the city of Cáceres and Cuiabá by the course of the São Lourenço river and then by the Cuiabá River; from Corumbá downstream, navigation proceeded until reaching the mouth of the Paraná River, subsequently following its course until the Atlantic Ocean. In 1859, the Companhia de Navegação do Alto Paraguai was established by José Antonio Soares offering railroads from Montevideo to Cuiabá, carrying both passengers and cargo (sugar, cattle, and erva-mate downstream, horses and mules, tobacco, and soap upstream) (ARRUDA, 2014; QUEIROZ, 2017).

This shipping company, which was subsidized by the imperial government, disappeared in 1864 within the context of the Paraguayan war. Chamorro's (2009) work demonstrates regional space was reorganized after the conflict with the resuming of navigation, with several companies being created to carry out several train lines within the Paraguayan basin. But with the opening of other railways and highways, shipping companies had started to disappear. Not even the creation of the state-owned company Serviço de Navegação na Bacia do Prata (SNBP) in 1943, based in Corumbá, manages to maintain itself in service, being extinguished in 1967. The Paraguay River was indeed a significant part of the of Brazilian Northwest occupation process before any highways were to be open.

Today, navigation on the Paraguay River is restricted to transport iron ores extracted from the State of Mato Grosso do Sul, which in turn is destined for the steel industry in Argentina. At the local level, navigation is focused on tourism and fishing.

Paraná River

Extending over 4,900 kilometers, the Paraná River is among the ten largest rivers in the world. Its source is found in Brazil, among Mato Grosso do Sul, Minas Gerais and São Paulo. It is the main river forming the River Plate basin, whose mouth is shared between Argentina and Uruguay.

There are a number of geopolitical aspects this river can present. In the territorial formation of South America's national-states, the mouth of Río de la Plata was the stage of a Spanish-Portuguese dispute for the control of accessing continent's interior by the mouth of the Paraná River. The Colônia do Sacramento, in the former Cisplatina Province, was founded by the Portuguese and incorporated into Brazil after independence, but in 1828 it was disassociated itself to form the Republic of Uruguay.

Another geopolitical facet of this river concerns the construction, in the 1970s, of the Itaipu binational hydroelectric plant, which shares energy production with Paraguay. Built only 17 kilometers from the border with Argentina, the dam caused a reduction in the upstream flow where Argentina intended to build a hydroelectric plant (MELLO, 1997).

Crossing the most densely populated region of Brazil, the main characteristic of Paraná River is power generation. Four of the five hydroelectric plants in this river are in Brazilian territory producing energy and ensuring water accumulation. Thus, holding full ownership of upstream rivers and generating a reduction or controlling the flow of water downstream is a perfect example of a geopolitical feature. On the other hand, navigation is facilitated upstream by the succession of lakes and canal locks forming the Paraná-Tietê waterway. In Itaipu's downstream, the Paraná River is extremely important for the river navigation of Paraguay due to its Mediterranean condition. The transport of grain is the major activity.

The Paraná River is considered contiguous when it borders Brazil and Paraguay. In another segment, down south, it divides its riverbanks between Paraguay and Argentina, and its mouth is shared between Argentina and Uruguay. But this river is also successive, as it crosses three countries and requires agreements and treaties for their various uses. In its riverbanks are several transborder urban agglomerations, Foz do Iguaçu and Ciudad del Este being the densest and that hold greater circulation of people and goods, shaping a cross-border region with diverse social actors (CARNEIRO FILHO, 2013).

Uruguay, Quaraí, Jaguarão and Chuí River.

The Uruguay River has its source in Brazilian territory, 65 kilometers from the Atlantic coast, and its course follows an inland route. It initially forms the Santa Catarina-Rio Grande do Sul border, later becoming a contiguous river in forming another 200-kilometer border zone between Brazil and Argentina, and with Uruguay for about 300

kilometers. Finally, this river divides Uruguay from Argentina to its mouth in the Atlantic Ocean. With a total length of 1,800 kilometers, the most intense navigation occurs in the low course of the Argentina-Uruguay border. In this part, there is a dispute between these countries due to the implementation, in Uruguay, of pulp and paper industries, which use a great deal of water in production processes and cause huge water pollution (REBORATTI; ALVARADO, 2006) (MACHADO; VELA, 2011) in the segment bordering Brazil. Navigation in this area is essentially local with small vessels.

East-west oriented Quaraí River is a tributary of the Uruguay River that has its mouth in the city of Barra do Quaraí. Part of the southern border with Uruguay for about 250 kilometers, it is also a contiguous river. On the other hand, towards the Atlantic Ocean, the Jaguarão River follows the 100-kilometer border contiguity until it reaches Mirim Lake. Finally, the Chuí stream flows into the ocean.

A common feature of these last four aforementioned rivers is the intense use of land for agriculture and grazing animals, on both sides of its riverbanks/borders, hastening desertification processes (SUERTEGARAY, 2018). The Brazilian State, through the River Basin Committees, seeks to regulate the various forms of use to ensure not only the rational use, but to avoid forms of use that have the potential for degradation.

Concluding remarks

Modern international system of nation-states, which emerged after the seventeenth-century Peace of Westphalia, guarantees the main principles of legal equality between countries, non-intervention, sovereignty and territoriality. The latter is what interests us the most because it refers to legal issues of delimitation and technical problems of delimiting borders. Natural borders, certainly because they were more visible and therefore easier to identify, served as initial

references for the definition of limits of powers, even before modern states. Thus, rivers, mountains, and vegetation, were and continue to be used for demarcations.

This territorial framework of any country can be constituted as simple attributes of States, however, in times of disputes between states for territorial control, these components gain a geopolitical sense. As we have seen, a river may represent the possibility of stocking water through dams. If it is contiguous, both states must participate in planning its uses; if it is successive, a dam can alter the downstream flow, causing losses in one State.

Brazil's river borders were delimited in different moments of national history, whether during the colonial period, Empire, or Republic. At every given moment, a particular situation. While the mouth of the Prata river went through disputes between the Portuguese and Spanish, the mouth of the Amazon River was entirely controlled by the Portuguese; as for river sources of the Amazon basin, all of them were beyond Brazilian control. In the early republican period, we saw Brazil and France disputing the far north, with the latter trying to make the Araguari River the official border instead of the Oiapoque River, and Argentina's claims over the construction of the Itaipu hydroelectric dam, between Brazil and Paraguay, on the Paraná River.

It is precisely because of the enormous extent of Brazil's borderline, shared with nine nation-states, generating huge differences in occupation on the Brazilian side, ranging from strong population density and social interaction in the South to weak interaction and low population density in the North, that the border area needs diverse public policies. The needs of the borderland communities of the southern arch are not the same as the needs of people on the northern arch. While on the Brazil-Venezuela border zone basic health services are the most important issues, in the southern Brazil-Paraguay border another bridge, aiming at improving the flow of vehicles, is being built.

As for the use of border rivers for navigation, many of them lost this function due to the construction of highways. The transport of heavy goods (ores, grains, petroleum products) occurs in the segment of the Paraguay River and part of the Mamoré-Guaporé River through Bolivia due to the complicated logistics of fuel distribution throughout Amazonian cities, mainly because of the lack of road infrastructure.

Finally, the use of water from border rivers for human and agricultural supply is associated with the density of these activities, which are certainly more representative in the southern border arch and on the Brazilian side. In the North arch, we believe that border rivers should be the target of public policies aimed at curbing illegal activities (mining, fishing, etc.), and stimulating the conservation of nature and river/forest interaction since this is what ensures the survival of numerous small riverside villages on both banks as well as indigenous peoples, who fish and circulate along these rivers.

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SECTION 2

Political geography

WHY WE SHOULD TALK ABOUT MUNICIPALITIES AND POLITICAL GEOGRAPHY¹

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Introduction

The issue of spatial divisions is recurrent in Geography and, like other founding themes of the subject, never leaves the agenda, regardless of any new approaches that shape research analysis. Different actors contribute to establishing spatial limits, real or symbolic, for practices at different scales that contribute to the complexities in subdividing and appropriating territorial portions with a well-defined focus and interest. Delimiting spaces is a strategy that dates back to antiquity and has always required the use of techniques with the objective of managing and controlling a subdivision through the exercise of some level of economic, cultural or political power.

1. This text was originally published in: Porque é preciso falar de municípios e de Geografia Política. **Revista Conhecer: Debate Entre O Público E O Privado**, 12(29), 2022, p. 31–54. <https://doi.org/10.32335/2238-0426.2022.12.29.8345>

Thinking of the world as divided into national states, which in turn are subdivided into administrative territories is never a banal exercise. There are history, interests and actions that result from the process of dividing the inhabited space – and even the uninhabited, if we consider Antarctica or the polar areas of the Northern Hemisphere. In this sense, this article resumes the debate around the spatial divisions which, in Brazil, define management scales and practices that give a political dimension to the territories that make up the country's administrative network. The focal point is the municipality, a fundamental institutional political space and place where life takes place. As Ulysses Guimarães said on one occasion: "People live in the municipality, not in the Union"².

Although this has been, in recent decades, a minor topic in Brazilian Geography, it has nevertheless been the object of analysis in different studies that make up a vast and qualified bibliography, especially in the Social Sciences. However, there is always much to say and unravel in the complex and differentiated universe of this evident geographical object. From the perspective of political geography, the municipality emerges as a territory of action, a fundamental, formal and informal electoral district, the place where interests are organized and politics are carried out through voting. In the political engineering of representative democracy in Brazil, the municipality has the institutional conditions that make it a privileged space for the action of society, political parties and their elected representatives, whose electoral connections are on the agenda through debates on parliamentary amendments. As such, municipalities constitute administrative spaces whose effects are felt in the daily lives of their inhabitants.

This article resumes and advances the discussion about the municipal division as the space of society life and as a well situated level of

2. Quote attributed to Ulysses Guimarães in the period of discussions of the National Constituent Assembly of 1987-1988, widely publicized by the press and appropriated by municipal movements.

public management and political representation, i.e. a place of voting and strategies to obtain votes. The assumption is that identifying characteristics and differences in the municipal network provides greater knowledge about the associations between spaces, voting and territorial management. It is worth noting that in the Brazilian democracy, which follows the proportional representation system, an analysis of the municipal level reveals a very different picture than the one seen on the national level (CASTRO, 2003d).

This article is divided into three parts. In the first, we review the debate on municipal emancipation in Brazil and the process of fragmentation or division of the territory, as well as the foundations of one or another rhetoric. The second part looks at the process of densification of the municipal network, using maps of different decades and comparing these with population distribution maps in the same periods. This constitutes a relatively simple observation exercise that helps form an understanding that the process of territorial division is eminently political and carried out by society. Finally, the third part discusses the municipality as an essential political level in the Brazilian federation, albeit little considered. The proportional representation system, when comparing the least and most populous municipalities, shows that the issue of isonomy in political representation does not consider territorial scales, thus creating a situation of profound distortions which has received very little attention. There is evidence that residents of less populated municipalities are more represented than those of metropolises. This issue deserves further debate, due to the implications it entails.

Municipal emancipation: division or fragmentation?

Although society resides in the municipality and it being the oldest administrative area in the country, the municipality has historically been considered the “ugly duckling” of the federation, especially by those who are willing to take it as an object of research. With

the exception of the spokespersons of the Brazilian Association of Municipalities (ABM), the National Confederation of Municipalities (CNM) and the Brazilian Institute of Municipal Administration (IBAM), or the work carried out by public bodies, there is no great curiosity about the many possibilities that the analysis of this unit opens up for the understanding of Brazilian space and society.

It is worth noting that the exploratory research in Geography journals classified in strata A1 and A2³ of the Qualis system of the Coordination for the Improvement of Higher Education Personnel (CAPES), between 2015 and 2022, has demonstrated that most of the research uses some municipality as object, but only as an area where the phenomenon to be studied occurs.. In other words, geographers seem to have little interest in discussing the municipality itself as an object of analysis. In 7 years of publication of the 8 main Brazilian Geography journals, only 3 articles dealt with the role that the municipality plays in Brazilian federalism.

Oliveira (2018) analyzed how the alternations in administrative competences between municipality, state and Union have impacted the distribution of possibilities for creating and implementing policies in different areas of society. In Cigolini (2015) and Moraes et al. (2021), the focus was on the process of creating new municipalities, looking first at the historical perspective, and secondly at the current political-administrative framework of the State of Paraíba. It is worth noting that during the same time only two articles have dealt with territorial fragmentation at the municipal scale, which reveals an acute lack of interest in this political-geographical process in recent years. Brazilian political geometry seems to be considered as a given,

3. We take into account the last Qualis evaluation available. The Brazilian A1 magazines analyzed were *Geosp*, *Mercator* and *Boletim Goiano de Geografia*. The selected A2 magazines were: *Ateliê Geográfico*, *Confins*, *Geographia*, *Ra'E Ga*, *Revista da ANPEGE* and *Revista do Departamento de Geografia da USP*. All articles, with titles and abstracts, published during this period that discussed the municipality as a scale of analysis were selected and analyzed.

without major issues, and as a result has remained largely off the radar of those who discuss the management of the territory.

However, in the 1990s and early 2000s, the creation of new municipalities was a more recurrent topic on the agenda of Geography and other human sciences. Driven by a vertiginous growth in the number of municipalities after the adoption of the Constitution of the Federative Republic of Brazil (CF, 1988) and by the near eradication of this process caused by Constitutional Amendment n. 15 (EC n. 15, 1996), the issue of municipal emancipation attracted attention in monographs, dissertations and theses – in many cases to criticize what was deemed harmful “fragmentation”, a division only to serve parochial political interests.

The theses of Cataia (2001) and Gomes (1997), as well as the dissertation by Silva (2007), are examples of this position of geographers. The same can be said of the doctoral thesis in Sociology by Martins (2003). In all these cases, the process of creating new municipalities is called *territorial fragmentation*, positioning it as a spatial strategy for capital reproduction.

Gomes (1997, p. 148), analyzing emancipations in the territory of Rio Grande do Norte, concluded that the true meaning of the “territorial fragmentation of Rio Grande do Norte state had an “essentially political character”, where the “political class sought to appropriate local political power” while preserving the traditional clientelistic and patrimonial formats. The population’s participation in this process would be the result of manipulation by the local elites, who would seek the necessary support for the progress of the emancipationist process. Thus, for the author, *fragmentation* became one of the mechanisms used to enable the local power of certain groups to prevail.

Cataia (2001) stated that the *political fragmentation* of the Brazilian territory was generated along horizontal lines contiguous with its neighbors, but also along vertical exogenous axes. Such vertical links would be networked points at the service of hegemonic agents.

Therefore, in addition to the already widely discussed horizontal character of borders, the global scale built with the new phase of capitalism would also impose a vertical dimension to the understanding of the political geometries of territories.

Citing and corroborating the discussion initiated by Cataia (2001), Silva (2007) related the creation of new municipalities in Mato Grosso to the expansion of the agricultural *frontier*. For the author, the *fragmentation* of the territory of Mato Grosso went hand in hand with the spread of agribusiness and the corporatization of the territory. This *fragmentation of the territory* is viewed with some concern by Silva (2007, p. 113), because “even as an unintended consequence municipalities create ‘spaces of convenience’ for the diffusion of capital”, and such fragmentation is used as an economic and political resource by large landowners of the state. The author believes that the real reasons for the *fragmentation of municipal government* in that place result from a scale that goes far beyond the local, into the national and global scale. As such, the creation of new local powers on the agricultural *frontier* “corresponds with the rationality imposed by the world market, i.e. spaces of world power rationalized by orders that escape local control” (SILVA, 2007, p. 118).

The sociologist Martins (2003) stated that Brazil differs from the former Spanish colonies in South America in the sense that the former Portuguese colony maintained its political unity, whereas the rest of South America became “fragmented” into several countries. However, according to the author, despite this political unity, “the same cannot be said about the internal organization of the Brazilian national state. Even though Brazil did not fragment ‘outwards’, that is, breaking up into several independent republics, it did become *fragmented* internally” (MARTINS, 2003, p. 13, author’s emphasis).

This quick review provides an important reflection on the subject, and it is necessary to resume a semantic and conceptual effort that was already carried out (AZEVEDO, 2013a; CASTRO, 2013) with

reference to the distinction between fragmentation and territorial division. This distinction is fundamental, since the term *fragmentation* continues to be used indiscriminately in research on municipal emancipation, as observed in Moraes et al. (2021). In this recent article, the terms *fragmentation*, *division* and *dismemberment* are used synonymously, alternating their use in each paragraph.

According to Coethe division into parts may prove to be positive when it comes sharing or distributing something. However, it can also be negative when it leads to disunion, discord, separation into diverse parts, agreement and idisposition. On the other hand, separation through fragmentation is not *s nud*, since to *fragment* essentially means *to reduce to fragments, break up*. What result fromntation, as a phenomenon triggered by a fracture or breakagerocess, the fragment, i.e. a broken or displaced part, an isolated, disunited, disconnected portion; an incomplete or unfinished part. In the field of politics, of interest here, the idea of fragmentation refers to the destruction of unity.

Etymologically, therefore, these words do not have the same meaning. However, in other cases the use of the term *fragmentation* instead of *division* responds to a certain ideological perspective, which considers this process part of a “strategy of inserting these spaces into the logic of exchange” (RIBEIRO, 2010, p. 292). In general, from the neo-Marxist perspective of the State’s relative autonomy (JESSOP, 1990; MASCARO, 2013; POULANTZAS, 1968), the space is considered as a whole that has been transformed into fragmented shards of private property, with these new municipalities acting as territories of hegemonic economic power. In well-known works on urban geography (CARLOS, 2001; CORRÊA, 2003; CORRÊA, 2010; MARCUSE, 2003), the fragmentation process appears as a product and conditioner of capitalist reproduction, and therefore a direct consequence of the territorial division of labor. From this perspective, today’s cities are “fragmented to the extreme, almost dragged and quartered with their parts painfully torn apart” (MARCUSE, 2003, p. 270).

The above perspective denies the autonomy of the political sphere in relation to the economic, not taking into account its different attributes and characteristics. We have already pointed out at other times how such an epistemological perspective hinders the analysis of political geography (AZEVEDO, CASTRO and RIBEIRO, 2021; CASTRO, 2021), which renders it unnecessary to reenter this debate. Bringing politics to the center of the debate means not taking vice for reason in explaining the phenomenon (Castro, 2013). Such analyses end up denying the positive consequences of municipal division, as revealed in different studies (AC ALVES, 2006; AZEVEDO, 2013b; NORONHA, 1997; STEINBERGER & MANIÇOBA, 2008; WANDERLEY, 2008), as well as the complex political processes involved, their different actors and political scales in Brazilian federalism (AZEVEDO, 2013b; TOMIO, 2002). In favor of structuralist explanations that intend to be generalizing, it is minimized that the “legitimate demand of the community for public services” (NORONHA, 1997, p. 58) is behind municipal emancipations, and that these political-administrative processes presuppose local referenda, legislative initiatives at the state level and a favorable federal constitutional basis.

It is impossible to detach this discussion from the political environment of the moment. The overlapping of data with contemporary Brazilian political history allows for a direct association between the political regime and the creation of municipalities. In other words, democratic periods like the Populist Republic (1945-1964), the New Republic (1980s) and the current period, are characterized by a political, institutional and fiscal decentralization that favors more municipal emancipations. On the contrary, dictatorial periods like the military regime (1964-1985), due to their centralizing characteristics, inhibited the creation of a large number of municipalities (Tomio, 2002). MRF Alves and JED Alves (2002) have pointed out that in 1965 a process of reordering the municipal territory was already underway, following the logic of centralization of power applied by the new

military government. According to the new policy inaugurated in this period, the number of Brazilian municipalities was reduced from 4,235 to 3,957 in 1985 (a 6.6% reduction). Complementary Act no. 46 (1969) advocated that no changes in the territorial framework of the state could be effected without prior authorization of the President of the Republic (Constitutional Amendment n. 11 [EC n. 11], 1978). For this reason we stress that the idea of an “emancipationist spree” (BRANDT, 2010; FERRARI, 2016) should be viewed with caution.

Territorial occupation and densification of the municipal network

As a federative unit, the Brazilian municipality has experienced periods of greater and lesser autonomy. Its recognition as a sphere of local power has been subject to criticism from important intellectuals who left marks in the vision of the municipality as a space of underdevelopment, vote rigging, clientelism, the economic, social and political domination of an elite little used to any form of change in the *status quo* (LEAL, 1947; VIANA, 1974). Almeida and Carneiro (2002, p. 3). As such the municipality was considered until the second half of the century:

[...] the territory where democratic projects were frustrated or perverted; the space of the harsh reality of oligarchic power, patrimonialism and clientele relations, rooted in the inequality of property and economic opportunities.

Definitely, until the 1988 Constitution the municipality was not popular. It was the realm of the “coronel”⁴ and vote rigging, while the former’s autonomy was uncontested since direct relations with

4. In the period 1889-1930 large rural landowners, particularly in northeastern Brazil were knowns as colonels (coronel), since some indeed had a military background. The term became synonymous with land-based political leader in the countryside.

state and federal power ensured the preservation of interests on this scale (CASTRO, 1992). The most important issues and themes of our federalism were under state jurisdiction. The municipality was seen, for many decades, as the administrative political framework in which public policies were doomed to fail if they did not meet the interests of local leaders. In this sense, the idea of the municipality as a place of local power was, for a long time, synonymous with bossism and exclusion of a local society complicit in this system, confirming the concept of “voluntary servitude” by La Boétie (1982).

From the second half of the 20th century, economic changes and the process of urbanization in the country progressively made this environment of interests much more complex, especially if we remember that the picture traced by Leal (1947) was based on municipalities in the hinterland of São Paulo. The erosion of the military regime, the limits of nationalist developmentalism and criticism about the inefficiency of the centralization of decision-making processes on public policies increasingly evidenced changes in society and in the territory.

The process of redemocratization, which began in the early 1980s, culminated in the installation on February 1, 1987 of the National Constituent Assembly, which worked and debated for two years until September 22, 1988, when it was voted on and the Federal Constitution (1988) was approved. In addition to the 559 parliamentarians, representatives of civil society like class organizations, social and religious entities, as well as indigenous leaders, also participated in the Constituent Assembly, which explains the concern with expanding individual rights and guarantees, and the effort to avoid institutional setbacks. This quick summary helps us to understand that decentralization of power was the order of the day and that the 1988 Constitution was indeed quite different from the previous Constitution of the United States of Brazil (Constitution of 1946), whose municipal political environment was the object of study by Victor Nunes Leal, or even compared to the II

Brazilian Congress of Municipalities (1952) held in São Vicente-SP and opened by Getúlio Vargas.

The association of decentralization with democracy favored the emergence of a municipalism no longer identified with the political colonels and with state and national governments, but as a unit of civil society action. This movement to return to the municipality on other bases was already underway with the foundation of the National Confederation of Municipalities (CNM, nd), in February 1980:

[...] the objective of consolidating the municipal movement, strengthening the autonomy of Municipalities. [...] from political and technical initiatives aimed at excellence in management and the population's quality of life. [...] The work of the National Confederation of Municipalities is aimed at the political-institutional representation of Municipalities in the face of the Federal Government and the National Congress, and the strengthening of municipal management.

The municipality entered the national agenda as an institutional territorial division and increasingly became an important political actor, in many cases in the hands of local civil society, in others still, in the hands of old actors aligned with the central power. The municipal universe is therefore differentiated, reflecting the country's spatial and social differences (CASTRO, 2005). Increasingly, the municipality has been perceived as a place of proximity between the government and citizens, and as the space for the practice and visibility of democracy. Nevertheless, it is also seen as as one of the undemocratic remnants of a political culture not completely overcome in society and in the territory. (CASTRO, 2003c).

It is in this varied and complex framework that the densification of the municipal network must be thought of. As the municipality and the municipal division became the object of studies and research, two realities emerged: the process of creating municipalities to accommodate electoral disputes of old oligarchies (CARLOTO, 2014; GOMES,

1997, 2017) and the civil society's demand for a political space for representation (CASTRO, 2003b; RODRIGUES, 2011; VEDANA, 2002).

At first glance, the evolution of the number of municipalities in different decades, when viewed on maps, leaves no doubt as to the density of this grid. But it also turns out that, like the distribution of the population, such densification is not spatially homogeneous. The suggestion is that one phenomenon cannot be analyzed without the other. If we look at the population density maps for the same years, it is evident that the municipal grid is denser where the population density is higher. What may initially seem banal therefore deserves more attention.

Figure 1. Municipal grid in 1940



Source: Brazilian Institute of Geography and Statistics (IBGE, nd).

Figure 2. Population density in 1940⁵



Source: IBGE (nd).

5. In this historical document, the legend presents the number of inhabitants per km², on a choropleth map in the following scales: 0.01 to 0.50; 0.51 to 1.00; 1.01 to 2.50; 2.51 to 5.00; 5.01 to 10.00; 10.01 to 25.00; 25.01 to 50.00; 50.01 to 100.00; more than 100.00.

Figure 3. Municipal network in 2017



Source: IBGE (nd).

Figure 4. Demographic density in 2017.



Source: IBGE (nd).

Two questions arise:

1. Is it possible to think only about the evolution of municipal divisions and consider that the majority of municipalities favors only local oligarchies? Or
2. Would it be the case to carefully observe the association between population density and the municipal grid and go a little further?

In the last decades of the 20th century, the weakening of the military regime reduced the legal barriers to the emancipation of districts that became new municipalities. The result was a significant multiplication of the number of municipalities from the 1980s onward. At the same time, it is essential to remember that population growth, the development of new economic sectors, as well as the expansion of urbanization and transport infrastructure favored the interiorization of the population, with great impacts on the territory. If we consider that these changes from that decade on led to the emergence of new economic and social actors in different parts of the country, and that the municipality is an important institutional political space, it can be assumed that some of the new actors were also willing to occupy these spaces (CASTRO et al. ., 2002; TENDLER, 1998).

Table 1 – Municipal network and population growth in Brazil in periods

Period	Population increase	Growth of the municipal network
1900-1950	34,505,963	453
1950-1970	41,194,600	2,385
1970-2000	81,660,963	2,742

Source: IBGE (2022).

It should be noted that at the height of the oligarchic period, from 1900 to 1950, 453 municipalities were created. Between 1950 and 1970 that number rose to 2,385, while a total of 2,742 municipalities were created between 1970 and 2000. Our argument is that, although the interest of local oligarchies in the search for new institutional political

spaces to defend their interests should not be disregarded, the analysis of the process of municipal division in the country over the last decades of the 20th century cannot be reduced only to these actors and their interests.

According to Abrucio (2006), the decentralization process that culminated in the FC (1988), with the inclusion of the municipality as a third federative entity, opened the perspective that reducing the distance between citizens and government would increase social control over policies and, consequently, more accountability. The question as to what extent this occurred remains open, since studies such as Rodrigues (2006) have indicated that the greater decision-making capacity of municipalities implies greater possibilities for the individualization and differentiation between these units. That is, even if the decision-making bases are the same, the decision-makers will be differentiated and some will achieve better results than others. In a study on the conditions of social policy councils in municipalities with a population of less than 10,000 inhabitants, Castro and Rodrigues (2004) found regional differences in the distribution of these councils based on the effectiveness of their action. This led them to reflect on the recurring issue of the historical conditions of the occupation of the Brazilian territory and the discontinuities resulting from them. In the South region, there is a greater concentration of small municipalities where these councils are installed and functioning properly, contrary to the situation observed in the North and Northeast regions. We believe that the greater social participation in municipalities located in the South, as opposed to the other two regions, reflects the historical process of occupation in the format of social bonds⁴, more horizontal in the South and more vertical in the Northeast (CASTRO, 2003a) and in the North. A similar trend was identified in a comparison between new municipalities created in the states of Piauí (Northeast) and Rio Grande do Sul (South) (AZEVEDO, 2013b).

The process of emancipating districts into municipalities came to a virtual end in 1996, when stricter legislation for the creation of new municipalities came into effect. However, criticism and discomfort persist regarding the number of municipalities in the country, including the fact that most municipalities created in the years immediately prior to the legislative change have less than 5,000 inhabitants.

Of the total of 5,570 Brazilian municipalities, 1,252 (22%) have under 5,000 inhabitants. Of these, 1,217 (97%) collect less than 10% of their revenue in taxes, rendering them dependent on the Municipal Participation Fund (FPM) and the State Participation Fund (FPE), in addition to other federal and state resources. A 2017 analysis of the FPM and municipal budgets from the same year showed that in municipalities with between 1 and 5,000 inhabitants, 48% of revenues originated from this type of transfer. The FPM sharing mechanism is based on coefficients by population group and the transfer percentage increases gradually, according to the size of the population. However, per capita less populated municipalities benefit the most, as well as those with a lower per capita income. In other words, it is according to the municipalists, a form of better territorial distribution of the wealth produced in the country. Nonetheless, the evident disparity between the spaces that generate resources and those who receive them has led to criticism of such transfers.

There is a clear perspective of redistributive policy in the way these funds are allocated, which is not bad in such an unequal territory. However, it has not received much attention, especially from those who consider themselves progressive. In a study on quality of life indices in municipalities, Klering et al. (2012) observed that the decentralization of public administration has had very positive effects on improving the performance or quality of management in municipalities, especially in less populated areas. They concluded that small size is interesting and strategic in terms of improving the quality of life of local populations.

Based on an economic vision that does not consider the redistributive effects of participation funds, the Proposal for Amendment to the Constitution (PEC) n. 188, of 2019, with the objective of incorporating micro-municipalities (population under 5,000 inhabitants). The argument of PEC no. 188 is financial, insofar as a merger would reduce expenses in municipal administration and the volume of transferred resources. An argument against PEC no. 188 points out that small municipalities, in many cases, have high human development indices (HDI), which demonstrates the degree of quality of life of their population. This means that the costs of implementing the new system are lower than the gains. On the other hand, those who defend it claim that these municipal management structures are onerous, as they do not usually collect as much as they spend. Opposition to PEC no. 188 is, in fact, a political problem with two dimensions: firstly, distributive justice opposes a strictly economic vision for the distribution of public resources; and secondly, control of institutional and electoral political spaces, which is opposed by parties like the Brazilian Democratic Party (MDB), Brazilian Social Democracy Party (PSDB), Social Democratic Party (PSD) and Progressives (PP), who would lose mayors through these mergers to parties with more voters but fewer municipalities⁵. Municipalities, as institutional political spaces are fundamental in the federative structure and in the proportional electoral system defined in the CF (1988). It is the place of learning and the beginning of a political career for most politicians in the country, in addition to being crucial for the capillarity of majority elections on a national scale, as in the case of candidacies for the Presidency of the Republic. However, concerns over the isonomy of the law and the opacity of the municipality to society led to a very different picture in the local political representation compared to the national scale, which is the subject of the following section.

The system of proportional representation in municipalities

Representation is, in principle, a relationship between the citizens that make up the political community of a national territory and their representatives. The latter form the legislative body, which in Brazil consists of the National Congress, state legislative assemblies and municipal councils. These make decisions authorized by their electorate, i.e. their constituents. The system to fill the seats of political representatives in the three federative scales is proportional, but the ideal proportionality of representation is not always possible. Therefore, the problem of overrepresentation of the smaller population units of the federation and underrepresentation of São Paulo, the most populous state, in the distribution of seats in the Chamber of Deputies of the National Congress is well known. This situation results from the constitutional rule that establishes a minimum number of 8 and a maximum of 70 seats for each state. Hence, in view of the proportional representation system, the distribution of the population by the territory and the different sizes of the electoral districts which, in the case of federal deputies are the states, there is not much to do. It should be noted that the current proportional representation system, despite being the object of criticism, has been able to express the characteristics and demands of society. In this sense, one should carefully analyze the idea of imbalance as a problem of representation on this scale (CASTRO, 2005).

With reference to the proportional system adopted in municipal legislatures for local political representation, the CF (1988) extensively detailed everything that was considered relevant to the country's society, including the format of the composition of municipal councils, with a maximum limit of 9 councilors in municipalities with up to 15,000 inhabitants, progressively growing to 53 councilors in municipalities with 7,000,000 to 8,000,000 inhabitants and 55 councilors

in municipalities with over 8,000,000 inhabitants. Table 1 details the legal determination.

Table 1 – Number of councilors by the number of inhabitants in a municipality

Number of councilors	Number of inhabitants	Number of councilors	Number of inhabitants
9	Up to 15 thousand	33	1,05 - 1,20 million
11	15 - 30 thousand	35	1,25 - 1,35 m
13	30 - 50 thousand	37	1,35 - 1,50 m
15	50 - 80 thousand	39	1,50 - 1,80 m
17	80 - 120 thousand	41	1,80 - 2,40 m
19	120 - 160 thousand	43	2,40 - 3 m
21	160 - 300 thousand	45	3 - 4 m
23	300 - 450 thousand	47	4 - 5 m
25	450 - 600 thousand	49	5 - 6 m
27	600 - 750 thousand	51	6 - 7 m
29	750 - 900 thousand	53	7 - 8 m
31	900 thousand - 1,050 million	55	Over 8 m

Source: Marketing Político Hoje (2020).

Table 2 shows, in an approximate way, the numerical relationship between representatives and constituents, i.e. the number of inhabitants of the municipality one councilor represents, based on size classes of the total population.

Table 2 – Population classes of the municipalities in relation to representation

Municipal Classe (number of inhabitants)	Average number of inhabitants/ councilor
Up to 5.000	368
5.000-10.000	763
10.001-50.000	1.771
50.001-100.000	4.438
100.001-300.000	9.089
Over 500.000	54.792

Source: Elaborated by authors⁶.

The data show that by law, the smaller the number of inhabitants, the better the proportion of representation on the municipal scale. This means that representatives are more visible and accessible to their constituents. It is worth considering that the Brazilian proportional electoral system was designed for the national scale and that very little attention was paid to the issue of proportionality at the local level. Since they are different political scales, different effects can be expected; after all, when the scale changes, everything changes (CASTRO, 2012). As can be seen, the municipal universe is quite different in terms of representation. Therefore, if the relationship observed in small municipalities is good, the one in large metropolises is not, and vice versa. This dynamic is what we try to explore.

From a territorial political point of view, the municipality is the place for learning politics. It is also an important political space as a formal electoral district for councilors and mayors, as well as an informal one for federal deputies and governors. In other words, the

6. Despite data from more than a decade, the proportion in the table has not changed significantly because the legislation on the number of councilors to which each municipality is entitled based on the number of inhabitants has not changed, nor have the population groups.

Brazilian representative democracy cannot do without the municipality as a privileged place for electoral and representative politics.

Research in recent decades has given visibility to the institutionality of politics in the municipality; the analyses do not always converge and the reality is very complex. Kerbaux (2005) draws attention to the fact that many federal representatives begin their political careers as municipal councilors. In response to criticism of the administrative costs in municipalities with few inhabitants, the author criticized the evident rationalization in economic calculations and how these come at a high political cost. Parliamentary amendments are important for congressmen because they are constitutional resources with which elected officials reward their municipal bases to obtain the approval of voters in the next election. It is worth remembering that in Brazil, part of the local infrastructure is improved with such resources.

The effort to understand the role of municipalities as part of the institutional political order is recent. Authors dedicated to the analysis of local power have emphasized decentralization and the impact of new institutions like municipal councils on public policies. In his research on the municipal legislature, Kerbaux (2001) realized that the Legislative Power assumes an important role in local government and that the leadership of the Municipal Council president has a significant impact on the course of the local decision-making process. In a subsequent research on the composition of the municipal Legislative Power in Brazil from 1996 to 2000, with an extensive collection of information to draw a more realistic picture of municipal policy, the same author contested the results of works by different authors in the late 1990s about the local legislature, who perceived it as a clientelistic institution for homologating the mayor's decisions. These works highlight the individualized transfers of resources that guarantee the reelection of councilors and the permanence of a vicious circle of local politics, ruled by clientelism, bossism, paternalism and the

hypertrophy of the Executive Power (KERBAUY, 2005). In her conclusion, the author states that

[...] the municipal government, as a result of the new rules on intergovernmental relations and the new functions it must exercise, is experiencing a period of reconfiguration of the decision-making arena and decision-making processes, coexisting with two distinct and contradictory lines of thought: (1) traditionalism and clientelistic actions that have always characterized local power and (2) universal procedures that characterize more innovative actions by local leaders (KERBAUY, 2005, p. 362).

In a study carried out in Araruama-RJ on the importance of the daily role of councilors, Lopez (2004) noticed that most councilors have electoral strongholds where their largest voter bases are concentrated. This underscores the importance of the spatial dimension of political representation, as voters come to see a certain councilor as the representative of their own neighborhood, locality or community. Lopez's (2004) conclusion highlights the exchange of favors, the networks of personal dependence and clientelist solidarity, i.e. fundamental relational patterns in our society already extensively studied by the Brazilian social sciences. For the author, even party competition at the municipal level does not stimulate the transformation of these traits, given that there are implicit rules according to which everyone operates and through which everyone is shaped (LOPEZ, 2004).

In a study on the institutional resources available in the territory for the exercise of citizenship in municipalities with less than 20,000 inhabitants, Castro and Rodrigues (2004) identified an important influence of location on differences in the social appropriation of these resources regionally. Small municipalities in the South, for example, showed better results than their counterparts in the Northeast and North. Differences were also visible in municipalities with up to 5,000 inhabitants. Likewise, previously mentioned studies (e.g. KLERING

et al., 2012) were quite optimistic about the quality of life and the management of public policies in small municipalities. Both cases can be an indicator that the advantages or disadvantages of a more accessible political representation for the citizen may depend more on the political culture of the locale. Although from the point of view of democracy, the more accessible the representative apparatus is to the citizen, the better, it is not possible to disregard the space and time of society.

Final considerations

Based on information about the municipality as a part of life and politics, available in different surveys prepared by IBAM and CNM, as well as information provided by the Brazilian Institute of Geography and Statistics (IBGE) and the Superior Electoral Court (TSE), this article presents the municipality as an object of analysis, not only as a continent where social phenomena develop. An initial bibliographical exploration in qualified journals in our country has revealed the scarcity of this debate in Brazilian political geography. Thus arose a need to return to this topic, due to its importance for the understanding of social and political phenomena.

The importance of this approach became evident when a survey of the last seven years of publication in respected Brazilian Geography journals demonstrated the absence of this discussion on the agenda of the country's geographers. In the rare instances the subject was touched upon the considerations revolved around the process of municipal emancipation and territorial fragmentation in general.

The municipal universe is complex, differentiated and does not include generalizing qualifications. From a critical perspective, the idea of a political-electoral and administrative framework is obscured by the issues imposed by the globalized capitalist order. As such, there is no relevance in reflecting on these divisions per se and on the

role that society plays in the formation of its territory. Looking at the municipality means looking at society – and what can be seen is not always pretty.

The present study discusses two realities that coexist in the universe of municipal politics, which in turn reflect society itself. The question that arises is to what extent the greater proximity of representation in the municipality favors overcoming the traditionalism of clientelist relations in the name of greater procedural universalism. The daily life of politics at the municipal scale mirrors Brazilian society and draws an unedited picture of the ways in which relations between voters and elected officials are organized, in addition to the capillarity of the political decision-making process and the public resources that nurture it.

The questions raised here, even though they do not have satisfactory and immediate answers, are important in putting new challenges on the agenda of Brazilian political geography, principally with regard to the universe of political representation at the municipal scale in the face of the contrast between the smallest and largest municipalities in the country, and the implications of the legal isonomy of the proportional representation system in such different territorial conditions.

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CREATION OF MUNICIPALITIES AND TERRITORIAL AUTONOMY¹

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Introduction

According to the Constitution of the Federative Republic of Brazil (CF, 1988), articles 18 and 30, Brazilian municipalities are fully autonomous federative entities in terms of political, legislative, administrative, and financial competence. This may be one of the reasons why, after the CF, hundreds of new municipalities were created. However, with so many new municipalities, the liberal political elites felt that the process was damaging, given that the creation of municipalities meant an increased State presence. Thus, Constitutional Amendment n. 15 was enacted (EC n. 15, 1996), barring the creation of new municipalities until the approval of a complementary law that would instate new, stricter rules to regulate this process. This took

1. This text was originally published in: A criação de municípios e autonomia territorial. **Revista Conhecer: Debate Entre O Público E O Privado**, 12(29), 2022, p. 11–30. Disponível em: <https://doi.org/10.32335/2238-0426.2022.12.29.8336>

place only in 2013, through a bill approved in the National Congress. However, the bill was vetoed by the then President, Dilma Rousseff, who claimed that the law continued to facilitate new emancipations. However, in a projection about the potential for the creation of new municipalities based on the law passed in the National Congress, Cigolini and Cachatori (2013) show just the opposite: the law in fact posed major constraints to new emancipations.

25 years after the promulgation of EC n. 15 (1996), the Legislative and Executive branches have never agreed on its regulation. Nevertheless, the constitutional amendment that curbed the creation of new municipalities did not completely stop the process, as 57 new municipalities were created after 1996. They were emancipated based on state jurisdictions prior to EC n. 15 (1996) and were subject to legal disputes before the Supreme Court (STF). Cigolini and Souza (2019) explain that these municipalities won the right to be instated because their emancipation process began before the publication of EC n. 15 (1996). The authors also indicate that the issue has generated serious institutional conflicts between the three branches of government, with the Legislative branch being criticized for failing to regulate the amendment.

The partitioning of the territory with such intensity as it has occurred in Brazil is explained by a number of researchers from various areas, such as Alves (2006), Ayres (2001), Banfanti and Guimarães (2004), Bezerra (2006), Bremaeker (1992), Caldas (2002), Cataia (2001), Cigolini (1999), Fávero (2004), Gomes and Mac Dowell (2000), Lima (2000), Mello (1992), Motta (2002), Noronha (1997), Pinto (2003), Rivera and Motta (2004), Shikida (1998), Siqueira (2003), R. L. C. Tomio (2002), and Wanderley (2007), which have brought up several motivations, e.g., territorial defense, access to economic resources, control of local power by elites, and pursuit of local development. Santos (2011), for example, argues that the creation of municipalities transfers social public policies to the local sphere of

government, where they can be better implemented, while Gomes and Mac Dowell (2000) show that emancipations may be a waste of public resources. These are two different views of the same phenomenon. The literature shows that municipalities have been created in different places throughout Brazil's history, with varying drivers. However, we state here that what unifies this entire process is the notion of autonomy.

This article raises the point that territorial autonomy underlies any other motivation for municipal emancipation. It is a qualitative and quantitative bibliographic research: On the quantitative level, we sought to identify the number of municipalities created in Brazil, by year, and relate it to qualitative concepts by means of a bibliographical analysis. According to Ludke and André (1986), literature analysis is part of qualitative research. It consists of a thorough review of the subject through articles, dissertations, theses, and specific legislation, in order to understand and define key concepts in the discussion, trace its history, and explore the research problem. This type of review can be characterized as a scientific investigation that contextualizes the problem at hand, establishing connections in search of the most adequate response to the proposed objective. Hence, our approach stems from the understanding of territorial division as intrinsic to the relationship between society and space, where spatial partitioning, at any scale, is not an end in itself, but a means. From this perspective, we aimed to identify, in an exploratory way, the relationship between the creation of *municipalities* and *autonomy*, with the clear purpose of sparking a debate: Wouldn't it be one of Geography's challenges to expand on the concept of the autonomy of places and its meaning?

Thus, what is presented here is a point of departure, not of arrival, in the face of this issue. We first turn to a literature review to understand and define some key concepts in the discussion, such as *territory* and *autonomy*, which we present under the subheadings "The municipality as territory" and "Territorial autonomy and the municipality".

Next, the literature review covers the history of the creation of municipalities and explores the research problem. Finally, we discuss the results, explaining how the territorial division into municipalities can be a way to achieve territorial autonomy and, consequently, expand the spaces for the construction of democracy and citizenship.

The municipality as territory

Gottmann (1973) shows that the concept of *territory* has evolved differently to account for situations of opening and closing of political communities. Nevertheless, territory has always been understood as a space delimited by lines between neighboring political authorities, as a mode of social organization and protection, as it takes on the function of providing security and creating opportunities. It is a space from which politically organized groups establish relations with other groups, obtain resources, and, based on their own values, organize the management of these resources. These issues have remained fundamental to the territory, with the nation state being the pinnacle of this understanding. According to Souza (1995), territory, as a concrete space in itself, with its natural and socially constructed attributes—linked to the idea of national sovereignty—was the core concept for the study of classical political geography.

However, this concept has been questioned for some time. For Haesbaert and Limonad (1999), territory is a historical and social construction built on power relations. They argue that the territory is born with humankind: We are inserted in a space and, being aware of this space, we build the territory. This notion dialogues with Raffestin (1993) when he states that space is prior to territory. The relationship between territory and humankind is mutual, for humans build the territory and the territory shapes humans.

For Souza (1995), in classical Geography the notion of territory was really very much linked to national sovereignty, with the State

as the sole holder of power. Presently, the author defines territory as a space of power relations between all the individuals in it. A territory is built and deconstructed over time, and the same space may have several territories, even in a short period of time. Souza (1995) believes that territory is not only something of the material substrate; for this author, the idea of territory goes beyond that and encompasses local relations and customs. He also says that one does not necessarily need to possess the soil as a material substrate, since the sea is also a territory and control over it is something of great importance from a geopolitical and geoeconomic point of view. Compared to the classic concept of territory, seen as virtually synonymous with the nation-state, these new conceptions were a major advance for Geography. This has led to the emergence of multiple uses of territory as an interpretative concept, as shown by Saquet (2013) and the extensive work of authors such as Marcelo Lopez Souza and Rogério Haesbaert. It has resulted in new and enlightening themes and approaches – as evidenced by the papers from the three editions of the Brazilian Congress on Political Geography, Geopolitics and Territorial Management (CONGEO), held in 2014, 2016 and 2018.

Therefore, territory is something built on a space, at any scale, and goes beyond the material substrate itself, bearing characteristics of the group that appropriates it along with a web of power relations among the individuals therein, which indicates that territory is the political expression of the organization of space. In this sense, there is no opportunity for autonomous political organization, by any group, without claiming the spatial base from which they can project their authority. This projection can be fleeting, lasting, forgo or require visible boundaries, but the fact is that space is always claimed.

We recognize this diversity, but since this study deals with municipalities, a territory with specific features that divides the space, we will focus on the formal territory, as recognized by the State. A Brazilian municipality is primarily a scale and a political territory. Its

interests, its political decisions, and the way it organizes itself yields results based on these choices, and this is something very significant in people's daily lives. Thus, the existence of a municipality is a process of creation and recreation of territorialities guided by local policies. This justifies the pressing need to debate the creation of this governmental level beyond circumstantial factors, but according to a logic that structures geographic spaces and how they are appropriated. One of these ways is to conceive municipalities as a territory based on the idea of autonomy of places, which, even according to a state and formal logic, has the possibility to leverage fundamental initiatives for political action and the construction of more horizontalized spatial relations.

Territorial autonomy and the municipality

The word *autonomy* comes from the Greek (*autós*: own and *nomos*: law), meaning the act of being guided by one's own laws and powers. In essence, it is the ability to govern oneself, to make one's own decisions without having to ask for permission. According to Alkmin (2015), autonomy is complex and dynamic and can be explored in various ways, both in its philosophical aspect linked to human morality, as per Immanuel Kant and Jean Piaget, or political, when we relate autonomy to political systems and issues of social coexistence surrounding democracy and autocracy.

Souza (2012) states that geographers are aware of both individual and social autonomy: in individual autonomy, the adult individual is able to establish ends, projects, and goals for themselves, as well as to follow up on them, whereas collective autonomy refers to the institutions' decision-making process to ensure equality and participation of all individuals in a social coexistence. Therefore, when we refer to territorial autonomy, we are talking about the social autonomy of a certain group or local residents who collectively make important

decisions concerning their territory. One example is the study by Alkmin (2015) that shows a self-governed resistance of the Zapatistas in Chiapas, Mexico, who are fighting against the modern state for the recognition of their territory. Other situations such as the struggle of the *quilombolas*, the indigenous people, and the *faxinalenses* can also be viewed as expressions of the search for a space of material reference and autonomous identity. The principle of territorial autonomy is associated with the determination of a people/community/group to seek recognition of, and the right to make decisions about, the space and resources in it.

Souza (1995) says that autonomy is a process of a society's self-institution, resulting in more freedom and less inequality; an autonomous society is one that freely defends and manages its territory, a society with power to run the resources of its territory. Such autonomy has been conquered, historically, through struggles and negotiations. In this case, the municipal territory, as a political organization, grants a certain degree of autonomy, which enables it to be integrated in the system of relations between different scales and places. Autonomy means making decisions about one's territory; it is obtained through resistance, and can take various forms, both in the political-administrative aspect—under institutional logics—and in cases such as the Brazilian municipalities or armed conflicts—as with the Zapatistas, with all due differences. Territorial autonomy means that decisions will be made and resources will be used, in part, to satisfy the interests of the local population. This is the scenario observed in the emancipated municipalities: local authorities are elected to manage the territory itself, there are new transfers and use of funds defined by the community itself (directly or by its representative authorities), and this results in local development, whether through the construction of new schools, health centers, infrastructure works, or through political participation.

Currently, Brazilian municipalities are autonomous territories because they are politically organized in a space, a place with power

relations where individuals choose and make their own decisions about local issues. According to the Federal Constitution (1988), art. 18, municipalities are full federative entities, autonomous in their politics, legislation, administration, and finances. Art. 30 lists their attributions:

- I - to legislate on matters of local interest;
- II - to supplement federal and state legislation where applicable;
- III - to set and collect the taxes of its competence, as well as apply its income, without release of the obligation of rendering accounts and publishing balance sheets within the deadlines set by law;
- IV - to create, organize, and abolish districts, in compliance with the state legislation;
- V - to organize and provide, directly or under concession or permission, public services of local interest, including public transportation, which is an essential service;
- VI - to maintain, with the technical and financial cooperation of the Union and the State, programs of early childhood education and elementary school;
- VII - to provide, with the technical and financial cooperation of the Union and the State, health care services to the population;
- VIII - to promote, when applicable, adequate territorial organization through planning and control of the use, parceling, and occupation of urban soil;
- IX - to promote the protection of the local cultural-historical heritage, in compliance with the legislation and the federal and state fiscalization actions.

As evidenced, the attributions are broad and give extensive opportunities for managing countless resources and organizing space. They also make it possible to connect the place to the regional, state, and federal scales. The creation of a municipality is the primary

condition for the existence of this autonomy and the establishment of these connections, which also operate in the opposite direction, that is, the higher scales begin to recognize the existence of a local power and to respect it as a full political actor, with all the consequences that may ensue.

This is consistent with Castro's (2005) statement about municipalities being primarily a political scale and territory, because, with these attributions, all municipal decisions gain significance nationwide. As can be seen, the power of autonomous municipal implementation is not negligible, and these issues are fundamental to social construction. Such autonomy has attracted the attention of many localities in recent decades, changing the geographic dynamics of territories from local to national as well as changing people's lives since, as new borders emerge, shifts in local relations create the conditions for political accessibility. The territory and its borders are not just passive elements; an autonomous territory is self-governing, has internal and external relations, and assumes a structural meaning for society.

Since the late 1980s, the creation of municipalities has been a relatively constant topic in Brazilian literature, as the phenomenon began to be regarded as an important process in national development in terms of territorial occupation and the political structure of Brazilian society. This debate has been thoroughly explored in the social sciences, particularly in Geography and Law. However, it has not yet been analyzed from the standpoint of territorial autonomy. Thus, a review of this relationship between territorial autonomy and municipalities in Brazil's political history and the formation of the national space may clarify the reason for the high degree of municipal autonomy today, as well as elucidate the fundamental role of this scale of government.

Creation of municipalities and autonomy in national municipal formation

Municipal territorial autonomy in the colonial period

Holanda (2003) says that the history of municipalities began in Brazil's colonial period with the São Vicente village, located on the southern coast of São Paulo, founded by Martim Afonso de Souza in 1532. Tomio (2005) states that municipalities were granted autonomy in that period, which according to Coteló (2019) was used as a strategy to enforce the authority of the Portuguese crown in the territory. In the name of the King of Portugal, the rural lords had unlimited and absolute power over the municipalities. Cigolini (2009) says that the model of municipality developed back in the colonial era was inspired by the constitution of those already existing in Europe. The author also points out that the autonomy of Brazilian municipalities was different from today's, because, besides being responsible for all local services and functions, they also had police and judicial duties. Prado Junior (1981) shows that in the country's first two centuries, municipalities legislated on almost all governmental matters. Hence, the debate about territorial autonomy traces back to this period.

This autonomy was not based on a political view of the Portuguese crown, but on the factual impossibility of controlling relations in the vast Brazilian space. There were laws that the municipalities had to respect and follow, but there were no institutions to enforce these laws, so the power was exercised by the good men, landowners, who were the foundation of the economic and political power of that period. It was virtually full autonomy, which only was questioned by the Portuguese crown once valuable minerals were discovered in Brazil. Geographic issues such as the size of the country hindered communication between the municipalities; therefore, a verticalized government was unfeasible, even though it was sought by the Portuguese crown with the introduction of a General Government. Despite this centralization attempt, the

European laws and orders did not apply to the Brazilian geographical condition, where each municipality applied the law according to local interests. It then resulted in this phatic autonomy, which would accompany the construction of the National State under a tension between local power and central power, one that always has been the subject of intense political debate.

This tension was already evident in the numerous attempts by the Portuguese crown to control the municipal councils, given how progressively dependent Portugal was on the resources coming from Brazil. By the time the colonial period came to an end, there were 187 municipalities that had originated from forts, Indian villages, mining sites, and farm settlements. Most of them were located in what are now the Northeast and Southeast regions, all very close to the Brazilian coast. In this sense, there was a spatial order inherent to the creation of municipalities in a twofold dynamic: exploitation of resources and defense of territory.

Municipal territorial autonomy in the Brazilian Empire

The Brazilian Empire was established upon the proclamation of independence, in 1822, and produced our first and most long-lasting constitutional text, the Political Constitution of the Empire of Brazil (Constituição de 1824, 1824). It was also marked by wars, concerns about national borders, migration of Europeans, continued enslavement of blacks, and a centralizing regime. The Empire saw conflicts between centralization and decentralization of power, which was the main political problem of the period. According to the Constitution of 1824 (1824), articles 167 and 169, municipalities were autonomous to make decisions regarding local issues, but in 1828 it was ruled that the councils would become merely administrative institutions, and their decisions were to be taken to the provinces, whose governors were appointed by the crown. This verticalization of power led territorial

autonomy to be misunderstood as anarchy, as though its existence compromised the centralizing power. Conservative and liberal clashes led to a troubled period regarding the competencies of municipalities, and, for the most part, the conservative power prevailed, lowering the municipalities' autonomy. This dispute between centralizing and decentralizing forces dated back to the colonial period. In the colonies, for instance, autonomy was given to protect the territory, but as time went by, this autonomy was seen as threatening by the Portuguese crown. During the Empire period, the Portuguese crown feared that provinces and municipalities would become independent to the point of dismemberment, compromising territorial integrity.

During this period a total of 662 localities were emancipated. They were created by expanding existing municipalities, but there was also a tendency to interiorize and protect the interior borders, with many municipalities being created near them. By the end of the Empire, Brazil had created 849 municipalities.

Municipal territorial autonomy in the republican period

Brazil's Empire came to an end in 1889 and a new political model was established in the country: the Republic. The power structure was then reorganized, and the Constitution of the Republic of the United States of Brazil (Constituição de 1891, 1891) had decentralizing characteristics, greatly favoring municipal autonomy. The early years of the Republic were marked by various events, such as military uprisings, separatist movements, dictatorships, and popular revolts. The fluctuation between centralized and decentralized power was a constant political factor throughout this period, municipalities continued to be created. There were changes in regards to their autonomy according to the character of each constitutional text—1891, 1934, 1937, 1967 and 1988—bringing different roles and functions to the municipalities, based on the social and political context of each time.

The first constitution of the Republic (*Constituição de 1891*, 1891) was inspired by the American model and shaped by French philosophy; as such, it turned the provinces into states with a high degree of autonomy. With decentralized power, municipal autonomy was enshrined in art. 68: “the states shall organize themselves in such a way that the autonomy of municipalities is assured in everything that pertains to their particular interests” (*Constituição de 1891*, 1891). However, as the “particular interest” was not defined and it was not clear whether the autonomy belonged to the states or to the municipalities, these local units ended up being understood as an administrative division of the federal states, being at the mercy of their control. This ended up generating a phenomenon that persists until today, although in a residual manner, in Brazilian politics: coronelism. Juliato (2003, p. 63) states that:

While municipal autonomy was reduced to an insignificant concept, the 1891 constitution failed to provide precise concepts about local political and administrative functions and, with the immense valorization of the Member States, these began to see in the municipalities elements of their own state autonomy. In practice, this represented the instrumentalization of municipal life placed at the service of the oligarchic interests, residual from the Empire, that now controlled the newly created Member states.

Coronelism was based on the existence of what Leal (1997) called *extralegal autonomy*, or a pact granted and negotiated between the elective state authorities (governors) who depended on the local leaders—the coronels. These coronels held political power by virtue of their land ownership, and imposed on the voters their chosen candidates for the state governments. Leal (1997) explains that coronelism was a municipal-based phenomenon, whose essence was the local chiefs’ unquestioning support of state and federal official candidates and, on the part of the state authorities, freedom for the ruling local chief. This was possible because the Republic, by granting the right to vote to large portions of the population that depended on the local coronels, put this

population under their control. The electorate voted according to the convenience of the coronels, who made deals with the state power who, in turn, made deals with the federal power. The lack of sources of funds for the municipalities, which were handed over by the states at the whim of their policy, helped in the process of municipal control. Thus, coronelism was characterized by a vertical power structure, built through the domination of votes in a horizontal structure based on local power. Leal (1997) says that coronelism was an overlap of the representative regime with inadequate social structures, and that the problem was not municipal autonomy, but its inexistence from a legal point of view.

Coronelism is key to understanding the distribution of power and resources throughout Brazil's federative history, because this experience has conditioned, in some way, all subsequent federal constitutions, whether through the centralization of power—as a strategy to eliminate the control of the local coronels—or in the decentralization attempts, creating mechanisms so that local powers, though highly autonomous, were not controlled as they had previously been. In any case, whether due to the factual or legal autonomy of the municipalities, it is not possible to understand Brazilian political life without understanding its role in this historical period. Between 1890 and 1930, emancipations occurred in all years (an average of 13 municipalities per year), with the states of São Paulo (which created 126 municipalities), Minas Gerais (103), Bahia (42), Pernambuco (27), Rio Grande do Sul (25), and Paraná (23) standing out.

The constitutions drafted during the Vargas Era following the 1930 Revolution (*Constituição da República dos Estados Unidos do Brasil* [Constituição de 1934], 1934; *Constituição dos Estados Unidos do Brasil* [Constituição de 1937], 1937) featured a liberal and military alliance against the country's agrarian oligarchies. The 1934 Constitution (1934)—characterized by labor laws, voting rights for women, nationalization of subsoil lands, among other advances—, in its art. 7, kept the idea that the states' actions should comply with municipal autonomy, which became clearer in art. 13:

Art. 13. The municipalities will be organized in such a way that their autonomy is assured in everything that concerns their particular interests, most notably:

I - the electability of the mayor and of the councilmen of the municipal council, the former being elected by the latter;

II - the enactment of their taxes and fees, the collection and application of their income;

III - the organization of the services within their competences.

§ 1º The Mayor may be appointed by the State Government in the Capital Municipality and in the hydro-mining stations.

§ In addition to those in which they participate, by determination of articles 8, § 2, and 10, single paragraph, and those transferred to them by the State, the following belong to the Municipalities:

I - the license tax;

II - the urban property and land taxes, the former collected in the form of a tenth or a rent bill;

III - the tax on public entertainment;

IV - the yield tax on rural property;

V - the fees on municipal services.

Autonomy was formalized and detailed in this version of the Constitution, which, according to Nunes and Serrano (2019), was a historical necessity based on the experience of the previous constitution and sought to explicit the economic and administrative burdens of Brazilian municipalities.

However, the 1934 Constitution lasted only three years; after a coup d'état to keep Getúlio Vargas in power, a new and authoritarian Constitution was issued in 1937, signaling a dictatorial government. According to Tomio (2005), this was the only constitution that did not grant municipalities any degree of autonomy. It had a nationalistic and centralizing bias, even though it assigned some competencies to municipalities:

Art. 26. The Municipalities will be organized in such a way as to ensure their autonomy in everything related to their particular interests, and especially:

- a) the choice of Councilmen by direct vote of the citizens who are registered voters according to the law;
- b) the enactment of taxes and fees within its competence under this Constitution and the Constitutions and laws of the States;
- c) the organization of local public services.

Art. 27. The Mayor will be freely appointed by the Governor of the State.

Art. 28. In addition to those attributed to them by art. 23, § 2, of this Constitution, and those transferred to them by the State, the following belong to the Municipalities:

- I - the license tax;
- II - the urban property tax;
- III - the taxes on public entertainment;
- IV - the fees on municipal services.

Art. 29. Municipalities in the same region may group together for the installation, operation, and administration of common public services. The group thus formed will have legal status limited to its purposes.

Single paragraph. It will be up to the states to regulate the conditions under which such groups may be formed, as well as the form of their administration. (Constituição de 1937, 1937)

This was a period in which power was very centralized in the hands of the Executive Branch, specifically the President of the Republic, who intervened directly in all matters pertaining to the states and municipalities (CIGOLINI, 2009). Evidence of this can be found in art. 9 of the 1937 Constitution: it was up to the President of the Republic to appoint the Governor of the State, and art. 26 stated that it was up to the Governor of the State to appoint the Mayor of each municipality. Therefore, in practice, the municipality had no elective autonomy. This

centralization was justified by Getúlio Vargas as an attempt to control the power of the local coronels, avoiding the perpetuation of coronelism, which the Federal Government opposed as it tried to modernize the country's social relations. Municipal control was seen by the Federal Government as social control, which had to be eradicated by a superior, verticalized power. According to art. 2 of the 1937 Constitution (1937), municipalities could have neither a shield, flag, anthem, or weapons. This was due to the idea of producing a nationalistic homeland ideology, an identity linked to the nation rather than to localities.

With the exception of 1940 and 1941, municipalities were created throughout the Vargas Era (an average of 18 per year), exceeding the numbers of the previous period (which totaled only 266 new municipalities).

The 1946 Constitution of the United States of Brazil (1946 Constitution, 1946) marked the end of a centralizing power, giving way to a constitutional law that was deemed modern for the time in terms of democracy and individual citizen freedom; according to Nunes and Serrano (2019), it was inspired by the new world order coming from Europe following the end of World War II. The 1946 Constitution (1946) gave back to the municipalities and states the right to have their own symbols, and the autonomous powers were listed in greater detail. Serrano and Nunes (2019) say that this new federative design strengthened the legislative and executive influence of municipalities at the national level, giving them a remodeled economic and administrative autonomy and ensuring a new interpretation of local interests, which strongly influenced Brazil's current federative design. Therefore, the municipalities once again became autonomous in their decisions based on their particular interest. This autonomy was guaranteed by the obligatory transfer of resources to the municipalities, with the creation of what is known today as the Municipal Participation Fund (FPM), responsible for the financial survival of thousands of small municipalities. Thus, autonomy was coupled with the appropriate mechanisms to maintain it, following a logic of distribution of public resources that seeks greater territorial equity.

With the exception of 1950 and 1956, the average number of municipalities created between 1946 and 1964 was 117.20 per year (totaling 2,221 new municipalities), very evenly distributed, with 1964 being the year with the fewest emancipations (134 new municipalities)—a significant number nonetheless.

There was a setback in Brazilian democracy with the coup d'état in 1964, whose objective was to prevent the popular advances of João Goulart's government, accused of being a communist. The five military mandates of the dictatorship were a period of repression, imprisonment, torture, assassinations, restrictions on freedom, and control of the press, among other crimes. Nunes and Serrano (2019) state that in the 1967 Constitution (1967) and in Constitutional Amendment no. 1 (EC No. 1, 1969), municipal autonomy was not changed; however, some restrictions appeared that did not exist in the previous constitutional text, since the dictatorship impacted the democratic system and the choice of municipal representatives, justified by the interest in national security. The municipalities included in the list of national security interests had their mayor appointed by the state governor, who was in turn chosen by the Federal Government.

Between 1965 and 1985 a total of 219 municipalities were created. In the years 1969, 1970, 1971, 1974, 1975 and 1984 no municipalities were created, resulting in an average of 11 municipalities per year, the lowest when compared to the previous periods. The interesting thing about this period is that there was a territorial strategy in the creation of municipalities: in regions of consolidated occupation there were restrictions designed to limit emancipation, whereas in the frontier regions of occupation, the criteria for emancipation were more feasible, facilitating the emergence of new municipalities.

With the process of re-democratization after the dictatorship, the Citizen Constitution (1988) was promulgated, thus named because it ensured the return of democracy and the basic rights that every human being should have. This constitutional text, which remains to

this day, granted unprecedented autonomy to municipalities, endowing them full federative status. In their respective competencies, the three levels of government are treated equally among themselves as parts of the Federation. The municipalities' competencies are detailed in art. 30 of the Federal Constitution (1988), and are fundamental in the construction of a more just, democratic, and citizen-oriented society. The mechanisms for the functioning of such autonomy were also guaranteed from the political and economic points of view.

Paniago (2018), when briefly addressing municipal autonomy in all constitutions, says that the 1988 Constitution was the one that granted the most autonomy to municipalities. The author also details aspects of this constitutional text concerning municipalities, such as the right to their own symbols, legislative powers, transfer of funds from the Union, and the insertion of the term "*local interest*"—a very significant addition. Between 1988 and 2001, 1,465 new municipalities were created (an average of 67 per year), the second highest average compared to the other periods.

Final remarks

We have observed, throughout this article, that the creation of municipalities has been a constant event in Brazil's history, and that territorial autonomy has always gone hand in hand with this process, even though it has suffered oscillations over the course of history, according to the specific circumstances of each period. Therefore, municipal autonomy and the criteria for emancipation established in the 1988 Constitution were not born in 1988, but were rather the result of a process that began in the country's colonial period. The partitioning of the Brazilian territory into municipalities reflects a quest for autonomy, whether in constitutional terms or from a factual point of view, with extra-legal characteristics. This has always been a political process, not a technical one. In Colonial Brazil, it served as a means of occupying and maintaining possession of the territory, with a high degree of autonomy. In the Empire it was used

as a means of sustaining imperial power, with restricted autonomy, but still in charge of organizing local life. In the Republic, autonomy varied according to each constitutional text, but from the point of view of the places, autonomy was used according to the interest of the dominant political structures, as is clear in the First Republic and in the Vargas Era.

Municipal autonomy has always reflected the project of nation at play according to the specific groups that held power. The number of municipal units created in each period shows that the municipal emancipations are inherent to this logic: when there is less autonomy, fewer municipalities are created. It is no wonder that in the democratic and decentralizing constitutional texts, as is the case of the 1946 Constitution (1946) and the 1988 Federal Constitution (1988), the process of territorial division, on a local scale, made significant progress. These are the localities seeking their political space within the nation by means of autonomy. It is the State closer to the citizens. The advent of EC n. 15 (1996), which restricted emancipations, is understood in a context of questioning the State and neoliberal policies.

Emancipation is seen as an opportunity for autonomy and territorial self-management. Throughout municipal history, autonomy has always assumed the role of controlling territory, with all the consequences that ensue. Therefore, the essence of the creation of municipalities is territorial autonomy and the search for control over the territory, which is shaped throughout history; today, this provides local residents with the strengthening of democracy and citizenship. It is worth remembering that other reasons correlate to the creation of municipalities, such as the control of resources, the search for the transfer of funds and for the interests of companies, groups and local elites, as well as the construction of representative spaces. All of these reasons are directly related to territorial autonomy and, from the conjunctural point of view, some stand out more than others in each major period along this process, but what remains constant is the search for greater freedom of action by the localities as a determining structural factor.

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FAMILY FARMING POTENCIAL IN THE CONTEXT OF THE BI- OCEANIC RAILWAY IN MATO GROSSO DO SUL, BRAZIL

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Introduction

Integration between the Atlantic and Pacific oceans is desired by national and subnational governments to favor trade relations between Asian and South American countries. Countries in South America are encouraged to adopt regulatory and administrative regimes that facilitate the interconnection and operation of energy, transport, and communications systems (COUTO, 2006). Linking these oceans reduces the time for goods to reach their destination, lowers travel costs, creates formal jobs in the localities along the way, and offers opportunities to expand agricultural trade.

The physical integration (road infrastructure) of the South American countries was driven by the Integration of the South American Regional Infrastructure (IIRSA), developed at the first meeting of

presidents in the 2000s, and sought to discuss axes of integration and economic and social development for a future expanded economic space. With IIRSA, the foundations were laid to increase the region's competitiveness in international trade, in which physical integration is privileged over economic integration (QUINTANAR and LÓPEZ, 2003).

At the beginning of the 21st century, changes in the Chinese economy and the relative economic growth of South American countries brought these markets closer. China starts to import commodities such as soybeans (also from Argentina), iron ore, and oil from Brazil, copper and wood from Chile and oil from Venezuela. On the other hand, it exports industrial products to Latin America (MEDEIROS and CINTRA, 2015). The growing interest in expanding trade relations with China encourages the resumption of the search for bi-oceanic integration, especially in the Brazilian states that produce these commodities.

The Brazilian dream of an interoceanic connection is an old one. The classic work of Mario Travassos, *Projeção continental do Brasil* (Continental Projection of Brazil), from 1935, portrays the strategic importance for national interests. He understood the passage through Bolivia as an excellent opportunity, as it'd exploit the “*nudos*” (knots) existing in the Andes mountain range. Inspired by the English geographer and geopolitician Halford John Mackinder, he understood that the heartland of South America was represented by the vertices of the triangle formed by Santa Cruz de la Sierra, Cochabamba, and Sucre. In his view, whoever dominated circulation through the heartland would be in a privileged position regarding international trade (TRAVASSOS, 1938).

The state of Mato Grosso do Sul has a geographically strategic position on the bi-oceanic route. It is located in the central portion of the subcontinent, between the largest commercial centers in Brazil and neighboring countries. The path via the Pacific Ocean

would shorten the journey through the Atlantic and Indian Oceans by 8 thousand kilometers to reach the Asian East. Two connecting corridors are possible across the state: the Midwest/Bolivia/Peru (which passes through the heartland) and the Midwest/Paraguay/Argentina/Chile. The first, further north, chooses two Peruvian ports (Matarani and Ilo) and two Chilean ports (Arica and Iquique) and leaves/enters Brazil through the city of Corumbá. The second corridor is oriented towards the port of Iquique, in Chile, through Porto Murtinho or Ponta Porã (LE BOURLEGAT, 1998).

The preference for the corridor that passes through the city of Porto Murtinho is due to the decrease in export costs; but also has political reasons. Entrepreneurs should be favored with the improvement of road quality and it is estimated that new industrial plants will be attracted to the route. The reduction of distances from Southeast Asian markets, mainly China, will put State's commodities in more competitive conditions for international trade. It should provide greater mobility of goods and people, as well as greater dynamism in some cities, such as Porto Murtinho/MS itself (CABRERA, 2020).

This work starts from the following guiding questions: does family farming around the bi-oceanic route have products that could be shipped through the corridor? Are these products ready to be marketed or do they require investment? What can be done? Thus, the objective of this article is to discuss the possibilities of the passage of the bi-oceanic route through the state of Mato Grosso do Sul and its use by family farming in its surroundings.

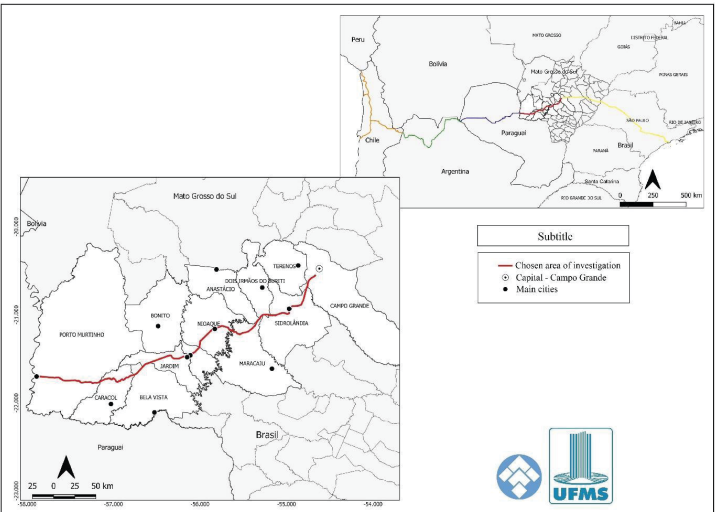
In addition to the description of the research procedures, the article presents three sections. In the following one, information on livestock production and municipal agriculture is presented. Then, it seeks to present the main herds, milk production, and crops of the municipalities with main cities cut by the route. The third section emphasizes rural settlements and discusses family farming products with the potential for creating or developing agro-industries.

Research procedures

This article originated from the research developed in conjunction with the extension project “Multidisciplinary Construction for the Bi-oceanic Corridor”, coordinated by the Federal University of Mato Grosso do Sul, with the purpose of presenting relevant actions for the promotion of economic and social development in the territories reached by the bi-oceanic route.

The analyzed path is part of the Midwest/Bolivia/Argentina/Chile infrastructure and development axis. It covers the space between Campo Grande and Porto Murtinho, in the state of Mato Grosso do Sul, Brazil, with a road length of 443 km (Figure 1). Moreover, through the bi-oceanic corridor, it's expected that four more cities should benefit along its path: Sidrolândia, Nioaque, Guia Lopes da Laguna and Jardim, respectively, in the East-West direction. Campo Grande was excluded from the research as it is the capital and has a small rural stretch in the chosen area of investigation.

Figure 1: Analyzed route of the Central-West/Bolivia/Argentina/Chile axis



Source: Bi-oceanic corridor Project, 2020. Org. Authors.

This is a descriptive research aimed to present the profile of agricultural and livestock production in the municipalities that are located on the bi-oceanic route, from Campo Grande to Porto Murtinho. Different ways of reading reality were chosen to a) indicate the promotion of family agro-industries; and b) take advantage of the marketable potential of family farming around the route. The forms of approaches were divided into two stages (Table 1).

Table 1: Procedures, methods, research source and territorial scale

Procedures	Methods	Research source	Studied Municipalities
Secondary data collection on municipal agriculture and livestock	Descriptive and quantitative	Agriculture and livestock production (2018), IBGE; Agricultural Census (2017), IBGE.	Sidrolândia, Nioaque, Guia Lopes da Laguna, Jardim and Porto Murtinho.

Source: Authors, 2020.

A more detailed sampling was carried out only of the municipalities mentioned above, whose main cities are crossed by the route. The choice is due to the understanding that there may be a greater mobilization of the populations involved, as well as logistical facilities for commercialization. The framework was chosen regarding the possibilities of presenting results within the deadline established by the project which originated this article.

For the collection of the main crops and products of municipal livestock, we've used the Brazilian Institute of Geography and Statistics (IBGE) data for Municipal Agricultural Production (PA) and Municipal Livestock Production (PP) of the year 2018, as well as data referring to family farming from the 2017 Agricultural Census - the most current at that time. The method used was quantitative; a sampling of what is being produced in the main surroundings of the bi-oceanic route that, with some effort, can be commercialized. With agricultural and livestock production, we've concentrated on

the last eight years to identify stability in each analyzed case. Family farming is the focus of this study and, therefore, we've attempted to look closely at the production of marketable surpluses.

Municipal Livestock Production

Concerning animal production in the studied municipalities, only Sidrolândia has quail egg production. Even so, it is not very significant, being around 2 to 3 thousand dozen per year. The potential for commercialization exists, as well as the market. Quails are small animals, which consume less than chickens and have eggs that are valued in the domestic market. In the current condition, it doesn't represent an economic activity that can be explored in the short and medium term.

Quail farming does not require large investments, when compared to poultry farming, and has a short-term economic return (PASTORE, OLIVEIRA and MUNIZ, 2012). In research carried out in the municipality of Ponta Porã, in the south of Mato Grosso do Sul, Silva et al. (2018) concluded that quail farming is an opportunity to increase family income, with a return on investment by the second year of production.

The chicken egg production is small when compared to the state production. Sidrolândia has more than 90% of the egg production along the studied axis, corresponding to less than 10% of the state production. Most come from free-range chickens, a market differential. On the other hand, commercialization depends on regularization and the existence of authorization for the sale of free-range eggs along the road axis is unknown.

Pasian and Gameiro (2007) point out that caipira and organic systems are beginning to be developed in Brazil on a commercial scale. They observe that in terms of legislation, breeding is not fully clarified, with the aggravating factor of the inexistence of a specific inspection body for free-range chickens.

Milk is one of the main products marketed by family farming and the largest production is in Sidrolândia (Table 2). Numerous dairy products such as cheeses, cream cheeses, sweets, butter, etc., have great acceptance, but struggle with regularization. Health surveillance certificates and inspection seal are required. Some rules have been facilitated with the approval of laws to minimize bureaucratic obstacles, such as for the artisanal cheese, but countless efforts are still needed.

Table 2: Milk production in thousand liters: municipalities of the bi-oceanic route, 2010 - 2018

Federation Unit and Municipality	Year				
	2010	2012	2014	2016	2018
Guia Lopes da Laguna (MS)	3414	3482	3404	2000	957
Jardim (MS)	2179	2264	2283	1800	1643
Nioaque (MS)	3944	4173	4059	2500	3057
Porto Murtinho (MS)	3458	3500	3512	2000	800
Sidrolândia (MS)	12269	13123	13053	9000	7561
Mato Grosso do Sul	511270	524719	528738	346300	309211

Source: IBGE. Municipal Livestock Research: 2010-2018.

The integration of public and private sector efforts, in the context of a systemic view of an organization, is essential to ensure the valorization and competitiveness of the national dairy sector on the world stage (VILELA and RESENDE, 2014). Despite the challenges of the production chain, Brazil is a major dairy exporter to the world. The country has competitive advantages such as a favorable tropical climate, natural pastures, good availability of land, and an increasing and cheaper production of corn and soybeans, grains used in animal feed (ROCHA, CARVALHO and RESENDE, 2020).

The 2017 Livestock Census shows that in the state of Mato Grosso do Sul, honey commercialization is stronger in Três Lagoas, Chapadão do Sul, Terenos, Brasilândia and Guia Lopes da Laguna. These

municipalities are responsible for almost 60% of the production sales, and Guia Lopes da Laguna is on the analyzed route. It's observed that there is enormous potential, as the municipal livestock production framework from 2010 to 2018 shows that Sidrolândia and Nioaque always produced more honey than Guia Lopes da Laguna (Table 3). It's important to state that the informal market is the major buyer of local honey production.

Table 3: Honey production in kilograms: municipalities of the bi-oceanic route, 2010 - 2018

Bee honey (kilograms)					
Federation Unit and Municipality	Year				
	2010	2012	2014	2016	2018
Guia Lopes da Laguna (MS)	4919	12000	22500	23850	21700
Jardim (MS)	5331	75000	75000	61500	48021
Nioaque (MS)	9220	9300	9791	9500	7016
Porto Murtinho (MS)	505	1000	1500	3000	1625
Sidrolândia (MS)	780	1500	1650	10000	7910
Mato Grosso do Sul	512417	820961	837099	835328	714343

Source: IBGE. Municipal Livestock Research: 2010-2018.

A certain honey production stability is observed in the municipalities crossed by the bi-oceanic route. Jardim was the only city that showed production decline and, even so, remained the main producer. Honey - *in natura* and its by-products, such as apitoxin, wax, royal jelly, pollen, propolis, soaps, etc. - is a potential to be worked on, to expand its commercialization networks. The added value can result in the expansion of income for producing families.

More than half of the Brazilian production of natural honey is destined for the international market, but the domestic market can be further explored (PASIN et al., 2012). The correct evaluation of the behavior of market prices and commercialization potential can optimally manage the enterprise (SABBAG and NICODEMO, 2011).

Another livestock potential is the production of wool, which, besides being slightly significant, is present in all the analyzed municipalities. Porto Murtinho is the largest producer on the route, but represents less than 4% of the State production. Wool is an important raw material for winter clothing and saddle equipment production (used in cattle handling), but lost its importance with the introduction of synthetic material. Even so, production increases can be promoted after market studies.

Studies carried out in Mato Grosso do Sul indicate that, despite the potential of sheep production, there are still obstacles to changing sheep industry from a subsistence activity to quality and sustainable production, such as the lack of professionalization and poor government supervision (GOMES, 2014).

In summarizing, the studied production of municipal livestock isn't very expressive in the state context. On the other hand, it is associated with family farming, which has enormous potential to increase its income and be inserted into important commercialization networks.

Municipal Agriculture Production

The municipalities along the route have commercial potential in various temporary and perennial agricultural products. According to data from the IBGE's Municipal Agricultural Survey, the analyzed municipalities don't have a tradition for the cultivation of peanuts, rice, rubber, rye, yerba mate, sunflower, guava, orange, lemon, papaya, mango, melon, palm heart, sorghum, tangerine, and grape. Rice and grapes did not appear in the 2018 survey in Nioaque.

Some products appear in only one municipality and don't represent a considerable percentage in the state context. This is the case of herbaceous cotton, oats, coffee, arabica coffee, passion fruit, tomato, wheat, and annatto that appear in Sidrolândia. Other products appear in just two municipalities, but also in small quantities: pineapple,

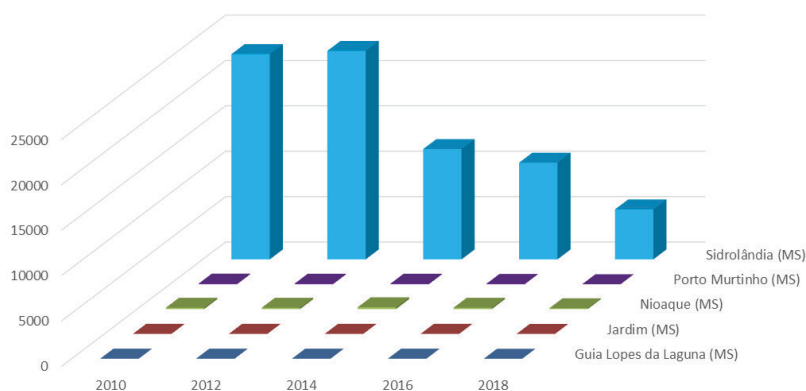
sweet potato, and watermelon in Sidrolândia and Nioaque; and coconut in Guia Lopes da Laguna and Nioaque.

Bananas and beans are common in the municipalities of Nioaque and Sidrolândia, but without regional expression, and they appear sporadically in Guia Lopes da Laguna. In 2018, beans appeared for the first time in Porto Murtinho during the analyzed period.

Sugar cane, corn, and soy are common in all municipalities and are produced on a large scale in Sidrolândia, which also has an alcohol plant. However, they are not usually produced by family farming, as will be seen later. When this happens, it is linked to the production of silage for feeding small and large animals. Based on the 2017 Agricultural Census, Cunha and Farias (2019) show that these three products account for 92.2% of the Gross Value of Production (GVP) of agriculture in Mato Grosso do Sul. They are related to agribusiness, produced on large properties and with intensive use of technologies.

Data from the 2017 Agricultural Census referring to the sugarcane area produced, specifically on family farming, point out Sidrolândia as a highlight (Graph 1). This is associated with the production of silage, but also with the rental of small rural establishments for the plant located in the district of Quebra-Coco. Sugarcane has enormous potential for commercial by-products such as brown sugar, rapaduras, sweets, molasses, etc. (IBGE, 2017).

Graph 1: Sugarcane planted area, in hectares, in the municipalities of the bi-oceanic route: 2017.

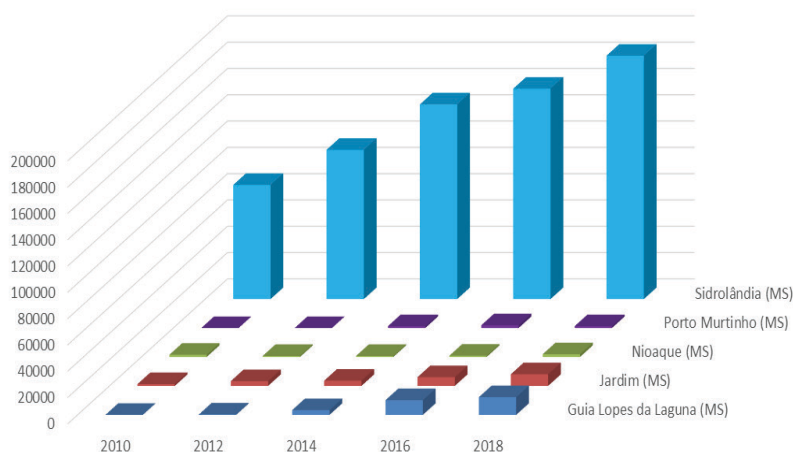


Source: IBGE. Agricultural Census: 2017.

To implement an agro-industry for manufacturing molasses, rapadura, and brown sugar, it is necessary to adopt good manufacturing practices for food products in general, as to meet the legislation on dirt and microbiological quality. The producer must be duly registered with the National Health Surveillance Agency (ANVISA), the Ministry of Agriculture, Livestock and Supply (MAPA), the Ministry of Health, and depending on the geographical location, in other bodies as well (JERONIMO, 2018).

It is not the same dynamic observed with corn, planted in large and small areas. Sidrolândia stands out in both sets (Graph 2). The product is essential for the treatment of small animals, which justifies its cultivation in rural settlements. The two municipalities with the largest number of rural settlements are the largest producers in the studied area.

Graph 2: Corn planted area, in hectares, in the municipalities of the bi-oceanic route: 2010 – 2018.



Source: IBGE. Municipal Livestock Research: 2010-2018.

The situation is different in the case of soy, where production is relevant to large areas. Only Sidrolândia, the largest regional producer, registered soybean crops in rural establishments between 10 and 100 hectares. Land leasing for planting soybeans is an alternative for small family producers with difficulties to gather resources or workforce for production. Organic soy represents, on the other hand, a niche market for family farming. However, there are difficulties for its viability, regarding the competition with conventional agricultural systems that operate in the municipality.

Cassava is produced in all the municipalities along the route (Graph 3). It is a frequent food on the tables of families in this region of the country and in Paraguay. It is produced in greater quantities by family farming and has great commercialization potential, both in natura and as its by-products, such as flour, starch, zest, and pasta. It can be marketed minimally processed (peeled and vacuum packed), pre-cooked or cooked. More recently it has been sold, homemade, cut as french fries and chips.

The manufacture of chips is a potential for industrialization of a cassava-based appetizer, with export possibilities. This would produce new jobs and, above all, the appreciation of the cassava crop (GRIZOTTO and MENEZES, 2003).

Almost all cassava production comes from small rural establishments. Its cultivation is widely practiced in the analyzed municipalities. Even so, when looking at the number of settled families, it is observed that many productive units don't develop cassava cultivation. This is potential to be promoted, especially for the development of small family agro-industries for processing cassava by-products.

Table 4: Rural family farming establishments with cassava planted area in the municipalities of the bi-oceanic route: area classes, 2017.

Area classes	Guia Lopes da Laguna	Jardim	Nioaque	Porto Murtinho	Sidrolândia
Less than 2 ha	7	8	46	2	20
From 2 to less than 3 ha	14	9	78	-	5
From 3 to less than 4 ha	2	6	45	-	4
From 4 to less than 5 ha	3	8	25	2	4
From 5 to less than 10 ha	21	57	41	8	141
From 10 to less than 20 ha	30	63	205	12	247
Less than 20 ha	77	151	440	24	421
From 20 to less than 50 ha	67	28	199	9	20
From 50 to less than 100 ha	14	6	17	2	5
Less than 100 ha	158	185	656	35	446
Total: less than 100 ha	235	336	1096	59	867

Source: IBGE. Agricultural Census: 2017.

The 2017 Agricultural Census registered the production of pumpkin, squash, and other varieties in all analyzed municipalities. It is a product with a great possibility of value-adding from investments in

family agroindustry. They can derive a variety of sweets, preserves, pasta, vegetable flour, etc.

It is important to highlight that family farming needs to be seen in a way that makes it the protagonist of their businesses. Network articulation is an alternative, but not the best, in the conception of this work. After all, as their products integrate the lines of big brands and wholesalers, part of the money escapes the farmers and stays with the capital, making the product more expensive so that it can generate more profit. This can drive away a significant portion of consumers, resulting in less income to the producers. Therefore, efforts must be made to train and support small family agroindustries.

Rural settlements and the potential for family farming agroindustry

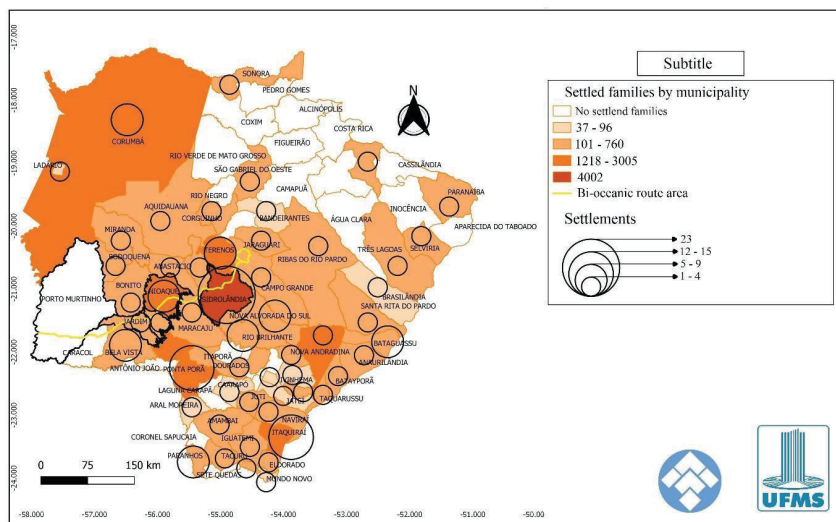
The greatest potential of family farming is in rural settlements. We chose to analyze only the Agrarian Reform settlements because of the ideological matrices of the researchers, who believe that this form is of reclaiming family farming, as a result of struggles for the land and the desire to remain in it. Other forms of family farming are not disregarded and were investigated together with rural extension technicians, as well as the production of the surrounding indigenous populations.

The analyzed section contains the municipality of Sidrolândia, responsible for the largest number of rural settlements in the State in its territory (Figure 2), with 23 units and a total of 4,002 settled families. Another highlight is Nioaque with eight rural settlements and 1,411 settled families. These are the municipalities with the highest number of families settled in the studied area.

Surely not all Agrarian Reform plots are productive. This condition is explained by a series of factors that pass through the adaptation of families to the territory, soil fertility conditions,

aptitude for agricultural practices, livestock or extractivism, and regularization to access rural credit and commercialize production (CAF - Register of Family Agriculture, former DAP – Declaration of Aptitude to National Program for Strengthening Family Farming, Pronaf), adaptation of the productive experience to the national or state policy of incentives to certain products, presence of technical assistance, etc.

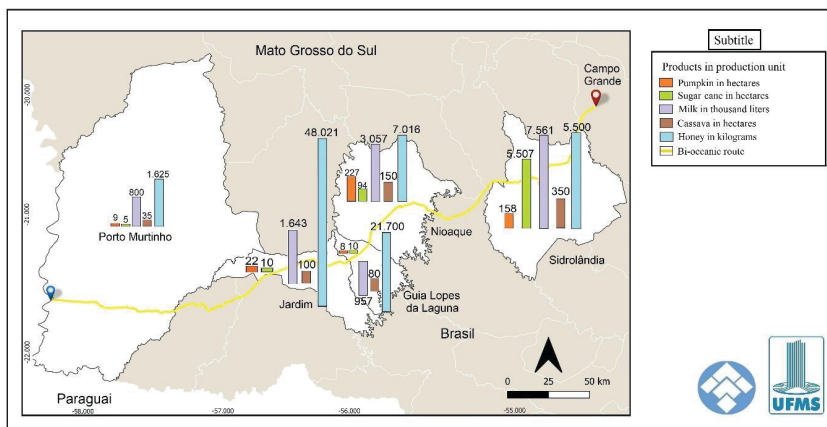
Figure 2: Rural settlements of the Agrarian Reform in the state of Mato Grosso do Sul: highlighted in the bi-oceanic route area



Source: Personal elaboration based on INCRA information, 2019.

From the surveys carried out and the analysis of the information, the following products were selected with the potential to establish agroindustry of family producers for future sales: pumpkin, sugar cane, milk, cassava, and honey (Figure 3). We considered its frequency in the analyzed period (2010-2018), the amount able to be commercialized/agroindustrialized, the existence of buyer markets and the main production areas.

Figure 3: Agroindustrial potential of family farming along the bi-oceanic route



Source: Author through IBGE data (2017, 2018a, 2018b).

Research carried out in 2014, during the 10th Fair of Native and Creole Seeds and Agroecological Products in Juti/MS, with 30 farmers from 15 municipalities in the state of Mato Grosso do Sul, showed that milk (56.67%) and cassava (43.33%) are the primarily responsible for generating income from family farming. Dairy and pumpkin sweets represent 26.67% and pumpkin *in natura* 16.67% (NASCIMENTO et al., 2016).

Pumpkin is a product with great potential for agro-industrialization due to its low investment and an excellent return for family farming. Nioaque and Sidrolândia are the two municipalities with the greatest possibilities for agro-industrial installations.

In another study, carried out at the Universidad Técnica de Manabí, in Ecuador, Rivadeneira et al. (2019) demonstrated the possibility of successfully using pumpkin flour production in poultry feed. They concluded that this can be an alternative to traditional raw materials (corn, soy) and that it helps in the yellowish pigmentation of the skin of chickens on farms. However, large-scale production demands high investments and lacks public policies to support it. Craft production

with marketable surpluses can be a way out. Sidrolândia and Dourados (about 150 km from the route) are important centers for raising chickens for slaughter. Terenos, 30 km from Campo Grande and 90 km from Sidrolândia, has the largest herd of laying hens in the state (about 60% of egg production).

Pumpkins are undervalued products for regional consumption, despite being widely consumed. In Sigchos, Ecuador, Beltrán (2016) observed that analyzed families which had continuous pumpkin production found in it a source of income and food security. It concludes that the lack of knowledge and the small culinary variety practiced with pumpkin limits its consumption by the population and, in a way, underestimates its potential.

In natura consumption is one of the main possibilities for pumpkin commercialization. The license must comply with the general rules established for products of plant origin and their by-products (Law 9,972, of May 25, 2000 and Decree 6,268, of November 22, 2007). The agro-industrial establishments must have a visa from the Sanitary Surveillance.

The existence of researches to point out the main varieties with potential for food use is essential, including the mixture of varieties with very low production costs. Vallejo Cabrera et al. (2010) carried out tests by crossing some pumpkin varieties in three locations in Valle del Cauca, Colombia. From comparative studies, they identified a variety with higher productive performance, dry matter content, and quality for fresh consumption. Studies like this are essential to point out the best varieties to be planted and the potential for creating family agroindustry for their processing.

Just like pumpkin, sugarcane has great potential for family agroindustry, especially in Sidrolândia and Nioaque. Sidrolândia has a sugarcane plant in its territory. It is known that in these municipalities, sugarcane cultivation began with the purpose of cattle feeding during the rainy season. However, peasant families who grow sugar

cane sometimes produce some by-products such as rapadura, brown sugar, and molasses as surpluses for commercialization.

In a research carried out in Capanema/PR, Tomasetto, Lima and Shikida (2009) highlighted the importance of partnership with governmental and non-governmental institutions in the elaboration of strategies, valorization and commercialization of products derived from sugarcane from family farmers. The transformation of artisanal products into agro-industrial products, maintaining the traditional style and recipe, is carefully monitored to be marketed and exported. They observed that brown sugar and other products derived from sugarcane contributed to increasing the income of producing families. Another study carried out in the municipality had already highlighted the importance of partnerships in the acquisition of credits, workforce qualification, and organization of peasant families (PERONDI and KIYOTA, 2002).

Milk production is present throughout the studied area, with a more expressive volume in Sidrolândia. The proximity of the largest dairy and consumer basin in the state (the surroundings of the capital Campo Grande) is a favorable factor. In addition to the commercialization potential of processed milk, various by-products such as cheese, cream cheese, sweets, etc. can add value and increase farmers' income.

Half of the producers interviewed in the municipality of Seara/SC produce colonial cheese and sell fresh milk to industries in the region (CARVALHO, 2015). It should be noted that selling milk to industries is to allow the extraction of surplus value by the industrial capital of the peasants. Much more interesting is the organization of cooperatives to manage mini-dairies and direct sales to final consumers and/or government programs, such as the Food Acquisition Program (PAA) and the National School Feeding Program (PNAE).

The milk sold *in natura* has a very low market value. In a survey carried out in Juiz de Fora/MG, Zoccal, Souza and Gomes (2005)

found that the average price per liter ranged from R\$0.38 to R\$0.42 and generated monthly income between R\$1.111,00 and R\$1,249,00¹. Producers showed interest in participating in programs to encourage milk production, market insertion, modernization of the sector and, above all, improve the exchange of information between milk producers and buyers.

The production systems (intensive in the trough, semi-intensive and pastoral ones) used in properties located in Santa Catarina and Rio Grande do Sul influenced the economic results of the dairy activity. However, the transformation and direct commerce of milk and/or its derivatives were decisive for the results. For that, technological and sanitary investments were necessary, such as a milking center, a room adapted to pasteurize the milk, and to produce cheese and other accessory equipment (DARTORA, 2002).

The results pointed to the importance of proper management of pasture/herd feeding systems and product diversification in the use of milk for commercial purposes. For this, the farmer needs to adapt to sanitary standards, which requires investments in improvements in corrals and food handling rooms, in addition to the acquisition of necessary equipment.

Cassava production is also present in the whole studied area. As it is a product closely linked to the gastronomic habit of Mato Grosso do Sul and currently produced by family farming, Sidrolândia stands out due to the greater concentration of peasant families along the route. It has great potential for commerce both *in natura* and its by-products such as flour, chips and pasta, among others.

Cassava bagasse flour is a low-cost raw material, with different technological characteristics and can be an alternative ingredient for the food industry, especially for diets and light products (FIORDA et al., 2013).

1. The average value of the real against the dollar in 2005 was R\$2.4352 to US\$1.00.

In a study carried out in the municipality of Tracuateua/PR, Modesto Júnior, Alves and Silva (2011) found that there are ample possibilities to increase cassava productivity and explore the current capacity to produce flour, without the need to increase the cultivated area. We highlight the selection of seed cuttings, selection and introduction of more productive cassava varieties, and determination of the best plant population per unit area. This reduces production costs and can double crop productivity.

Cassava is a product of wide versatility and can be used to feed animals. Crops that follow recommended techniques can achieve high yields. The plant, used in its entirety, is an excellent forage, rich in protein, carbohydrates, vitamins, and minerals, with a high degree of acceptance by animals (ALMEIDA and FERREIRA FILHO, 2005).

Another activity with high potential for agro-industrialization is the production of honey, occurring throughout the studied route. It is favored by the number of bees attracted by the diversity of plant species with abundant flowering, associated with policies to encourage contemplation tourism in Bonito, Jardim, Guia Lopes da Laguna and Bodoquena, mainly, which are around the route. Added to this is the interest of peasant families in beekeeping and the encouragement of rural extension agencies.

In a study carried out in Capão Bonito/SP, Fachini, Oliveira and Veiga Filho (2013) point to beekeeping as a viable income alternative for those who wish to professionalize the activity. It is an alternative, profitable economic activity that requires little time and small areas, ideal for the profiles of family farming (OLIVEIRA et al., 2004; FACHINI, OLIVEIRA and VEIGA FILHO, 2013).

The practice of beekeeping is intertwined with the sustainability of the use of natural resources and the awareness of producers for the conservation of the environment. It can strengthen associations and, above all, generate income, work, and food for families (LIMA, 2005).

Briefly, it is possible to point out that there are several difficulties to be overcome for the establishment of family agro-industries. Perhaps the main one is related to the need to organize into associations or cooperatives, as it implies the union of producers. Furthermore, Nascimento et al. (2016) identified in a survey with farmers at a fair in Juti/MS the following obstacles to commerce: poor transport infrastructure, lack of support for the implementation of family agro-industries, diversification of commercialization channels, and a routine of technical assistance, etc.

Final considerations

Family farming around the analyzed section of the bi-oceanic route has a considerable diversity of agricultural and livestock production. Among these, pumpkin, sugar cane, milk, cassava, and honey were the most promising for expanding the production scale and investments in family agro-industries, given the greater relative abundance of production compared to the others.

It is worth mentioning that these products are already commercialized, but they lack public policies and government support in the elaboration of strategies to raise productivity levels and production volumes, as well as for insertion in consumer markets. As a result, they could no longer be subsistence products with sales of only surpluses to become, who knows, the main source of family income.

The organization of associations and cooperatives was understood as relevant for the professionalization of the farmer as a negotiator for national and international markets, as the implementation of the route brings this infrastructure advantage. We emphasize the innovations and articulations with groups of organic producers to mark a marketing differential.

This work intended to discuss the possibilities of the passage of the bi-oceanic route through the state of Mato Grosso do Sul and

its use by family agriculture. New studies are needed to deepen this information, investigate the interests in expanding the scale of production and the dreams of peasant families, ascertain the real condition for compliance with sanitary and environmental regulations, the expectations of possible consumer markets, training and necessary logistics, among others. many others.

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THE ROLE OF BNDES IN SOUTHERN AFRICA: PROJECTS IN WALVIS BAY CORRIDORS AND NACALA CORRIDOR

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Introduction

From the end of the Cold War, the new multilateral scenario changed the international insertion of less developed countries in the international sphere. According to Saraiva (2007), the new international context after the attacks of September 11, 2001 brought the need for Brazilian diplomacy to rethink its international insertion, reinforcing multilateralism and closer ties with other countries in the global South.

Seeking to reach a position of regional leader in the South Atlantic, Brazil started to act following the pattern of the main economies.

The world's main economies have official credit institutions that finance exports and investments made by national companies abroad. Motivations for official support include fundraising, commercial gains and increased competitiveness of their companies (GUIMARÃES et al, 2014).

In this sense, during the Lula da Silva and Dilma Rousseff governments, the National Bank for Economic and Social Development (BNDES) was used to finance Brazilian companies abroad in a South-South foreign policy. In this period, BNDES supported the expansion of Brazilian state-owned, mixed or private companies towards Latin American and African countries (SARAIVA, 2007). In this context, Africa gained importance in Brazil's international relations.

Infrastructure projects supported by BNDES in Africa included the construction of gas pipelines, aqueducts, sanitation works, roads, energy generation and distribution, ports, airports, implementation of irrigation systems and integrated transport systems. Projects that should contribute to the modification of the economic and social geography of the regions where they were implemented and to the development of the productive chains of the Brazilian economic sectors involved in exports (GUIMARÃES et al, 2014).

Thus, this article aims to analyze the BNDES' performance and impacts in strategic areas in Southern Africa: the Nacala Corridor and the Walvis Bay Corridors. An important area for African integration, the Nacala Corridor (located between the 13th and 17th South parallels) is one of the largest freight circulation railway lines in East Africa and is located in northern Mozambique. In turn, the Nacala Railway is about 912 km long and connects the Mozambican cities of Nacala and Moatize, crossing the center of Malawi. In turn, the Walvis Bay Corridors consist of four transport corridors that connect seven southern African countries (Angola, Botswana, Namibia, Democratic Republic of the Congo, South Africa, Zambia and Zimbabwe) to the port of Walvis Bay, in Namibia.

The aforementioned corridors are very important for the economies of those countries and fundamental for exports of products from the Southern African regional blocks: the Southern African Development Community (SADC) and the Southern African Customs Union (SACU).

Regarding the methodology of this work, this is a qualitative research, under the perspective of International Relations and Political Geography, based on bibliographic analysis, enriched by cartography produced with ArcGIS software and spans the first two decades of the 21st century.

BNDES: a foreign policy tool

Founded in 1952, the National Bank for Economic and Social Development (BNDES) was created with the objective of being the formulating and executing agency of the national economic development policy in Brazil. Throughout its history, the BNDES has been a long-term financing instrument for carrying out investments in various sectors of the Brazilian economy (BNDES, 2021).

During the Lula da Silva government (2003-2010) and in the first Dilma Rousseff government (2011-2014), the BNDES was the main promoter of policies to support the internationalization of Brazilian companies. In this sense, the BNDES was a fundamental tool in Brazil's foreign policy throughout that period, when the country had an active presence in Latin America and Africa. Between 2002 and 2012, trade between Brazil and the African continent increased sixfold, from US\$4.9 to US\$26.5 billion (BNDES, 2013).

In the Lula da Silva administrations, the projects in Africa financed by BNDES were built with the support of Brazilian diplomacy. According to Lautenschlager and Catermol (2011), Brazilian diplomacy has intensified its activities on the African continent, opening new embassies and scheduling presidential visits accompanied by Brazilian businessmen.

Between 2002 and 2016, the BNDES financed approximately US\$ 14 billion for fourteen Brazilian companies in the engineering area. These companies carried out works and services in eleven countries in Latin America and Africa. Among the engineering companies, Odebrecht, a Brazilian conglomerate, concentrated approximately 80% of the bank's financing (GOES, 2017).

It is important to mention the disproportion in the destination of these investments. In the case of Mozambique, BNDES financed Brazilian exports destined for the Nacala International Airport construction project, by Odebrecht. For this specific project, BNDES lent US\$175 million (BNDES, 2017). In addition to the airport, Odebrecht developed a Bus Rapid Transport project in Maputo and was responsible for the implementation of an industrial free zone, both works financed by BNDES. In turn, Andrade Gutierrez was financed by BNDES to build the Moamba Major dam, and the company OAS worked in Mozambique on Vale projects of Nacala Corridor railway line and Nacala-a-Velha port terminal for export of coal (GARCIA; KATO, 2016).

In relation to the number of projects, in 2016 the Court of Auditors of the Union of Brazil (*Tribunal de Contas da União*) analyzed 149 operations granted by BNDES to several countries in Latin America and Africa. The portfolio of operations covers a large group of hydroelectric plants, gas pipelines, aqueducts, subways, energy transmission and gas distribution networks (BRASIL, 2016).

Nonetheless, from the Temer government (2016-2018) onwards, Brazil's new foreign policy directive led the country to abandon the project of consolidating itself as a regional power in the South Atlantic. The country, which had managed to expand its sphere of influence in the world during the Lula da Silva and Dilma Rousseff administrations, resumed, during the Temer government, its peripheral condition in the international system, benefiting US and Chinese competitors in Africa. Under the direction of Maria Silvia Bastos

Marques (2016-2017), the BNDES cut international financing to Brazilian construction companies and ended the global expansion of Brazilian companies, which had to interrupt or abandon a large part of their works on the African continent.

The role of Brazil in Africa: Infrastructure, Transport, Mining and Energy Projects

In 2004, Brazil, through Mercosur, began a closer relationship with the countries of Southern Africa. In December 2004 Mercosur and Southern African Customs Union (SACU) signed a preferential trade agreement. An updated version of the agreement was signed in April 2009, in which SACU gave preference to Mercosur in the purchase of more than 1000 products produced by SACU, in return, reducing import taxes on 1000 products from the Mercosur in sectors such as agriculture, plastics, chemicals, textiles and equipments. In turn, Brazilian investments in Africa were concentrated in sectors such as oil, mining, agribusiness and aviation (IPEA, 2012).

During the Lula da Silva government, the importance of Africa in Brazilian foreign policy was evident. Brazil's foreign minister visited 30 African countries between 2003 and 2010. Mozambique received special attention, having been visited in 2003, 2005, 2008 and 2010 (IPEA, 2012). It is important to highlight that Mozambique was a great destination for Brazilian companies in Africa, despite this, it only started to receive financing from BNDES in 2011, during the Dilma Rousseff government (VILAS-BÔAS, 2014).

In Mozambique, the company Vale, through its project to explore the Moatize coal mine, in Tete province, leveraged the move of several other Brazilian companies to the country (LAZZARINI, 2011). The removal and resettlement of 1,365 families from Moatize was completed in 2010. In September 2011 Vale began extracting and exporting Mozambican coal. In turn, Vale launched in Zambia, in 2010,

the Konkola North copper project through its joint venture with African Rainbow Minerals (VALE, 2012). Copper production started in 2013, however, Vale would sell its stake in the project in 2017.

A few years before, in April 2008, Petrobras started to assume a more assertive posture in Africa. Its activities prioritized the search and extraction of oil in deep and ultra-deep waters, with operations in different countries. In Namibia, Petrobras acquired a 50% stake in an offshore oil exploration block in deep and ultra-deep waters (IPEA, 2012). In addition to energy projects, Brazil and Namibia maintain military cooperation. Since 2001, the Brazilian Navy cooperates in the formation of the Namibian Navy through the Brazilian Naval Mission in Namibia. The Sailor Training Course operates at the Walvis Bay Base.

Another result of the financial support provided by BNDES for Africa until 2016 was the construction of one of the largest hydroelectric plants on the continent. In this sense, in 2017, Angola inaugurated its largest hydroelectric plant, the Laúca Hydroelectric Power Station, on the Kwanza River (ALENCASTRO, 2020). The works of the plant (which has the capacity to generate 2,070 megawatts) were started by Odebrecht in 2012.

Silva (2016) highlights that during the government of President Lula da Silva Brazil paid special attention to Southern Africa Development Community (SADC) countries. In this sense, the main bilateral project between Brazil and Zimbabwe was the *Mais Alimentos* (More Food) of which Zimbabwe was the first African country to benefit. The Brazilian government approved for Zimbabwe a credit line in the amount of US\$98 million, granted by PROEX (Brazil's Export Financing Program). The credit line granted by PROEX financed the acquisition of Brazilian machines and implements that would be used in the execution of *Mais Alimentos* locally.

An important point to emphasize is that Brazil's relations with the SADC countries were shaped by the HDI and GDP characteristics of

these countries. These South-South relations were impacted by the different levels of development and by the demographic and socioeconomic characteristics of each country, which can be seen in table 1.

Table 1 - SADC Countries: HDI, GDP, Population and Exports 2019

SADC countries	HDI (Rank) ¹	GDP, at current prices - US dollars ²	Population ²	Main export products ³
Angola	0.581 (148)	85.000.612.455	31.825.295	Crude petroleum (86.7%)
Botswana	0.735 (100)	18.340.573.366	2.303.697	Diamonds (89.7%)
Democratic Republic of the Congo	0.480 (175)	47.319.623.596	86.790.567	Refined Copper (49.8%)
Eswatini	0.611 (138)	4.594.332.076	1.148.130	Laboratory Glassware (40%)
Lesotho	0.527 (165)	2.460.074.277	2.125.268	Diamonds (41.9%)
Madagascar	0.528 (164)	14.104.664.678	26.969.307	Vanilla (20.3 %), Raw Nickel (14,7%)
Malawi	0.483 (174)	8.099.266.794	18.628.747	Raw Tobacco (55.6%)
Mauritius	0.804 (66)	14.180.437.895	1.269.668	Textile Products (29,36%)
Mozambique	0.456 (181)	15.296.745.151	30.366.036	Coal Briquettes (24.1%), Raw Aluminum (17.4%)
Namibia	0.646 (130)	12.366.279.692	2.494.530	Raw Copper (17.1%), Diamonds (15.1%), Uranium/Thorium (10.2%)
Seychelles	0.796 (67)	1.698.865.195	97.739	Fish (46.17%)
South Africa	0.709 (114)	351.430.991.183	58.558.270	Gold (15.5 %), Platinum (8.86%), Cars (7.01%)
Tanzania	0.529 (163)	61.136.840.816	56.379.874	Gold (32.4%)
Zambia	0.584 (146)	23.085.061.140	17.861.030	Raw Copper (53.4%)
Zimbabwe	0.571 (150)	21.440.758.840	14.645.468	Gold (42.4%)

Sources: United Nations, 2020¹; United Nations, 2021²; OEC, 2019³.

The SADC countries have demonstrated a diversified range of HDI scores. Despite the majority of the countries having a low

(Tanzania, Mozambique, Malawi, Madagascar, Lesotho, Democratic Republic of the Congo) to a medium development (Eswatini, Zambia, Zimbabwe, Namibia, Angola), three countries (Seychelles, South Africa and Botswana) have reached a high development standard and only one (Mauritius) has been qualified to be a very high developed country. The size of their GDP and of their population are very contrasting too, as it encompasses smaller countries (around 100.000 to three million people) to extensive ones of about 85 million inhabitants. For instance, South Africa and Tanzania have almost the same amount of citizens, but Tanzania's GDP is around six times smaller than South Africa.

The majority of the SADC countries rely on the exportation of primary goods, which accounts for their economic development. Despite the economy of most countries relying on a single export product (Botswana's diamonds represent around 90% of the country's exportation), others have diversified primary products. In this context, South Africa differs from other countries in the region by having a diversified export basket (since it is an emerging country and a regional power).

Amidst this diverse context, the works carried out by Brazilian companies in Africa generated jobs in Brazil for the supply chain of goods and services. BNDES financing to Brazilian companies that operated in Africa were guaranteed by the Export Credit Insurance.

In turn, in that period, Brazilian companies in Southern African countries, such as Mozambique, were involved in the construction of large engineering works and civil construction was the sector that most boosted Brazilian investments. Around 2,500 new jobs were created in Mozambique during the period of construction and modernization of the International Airport of Nacala and the rehabilitation of the Sena railway, among other engineering projects (MABUCANHANE, 2018).

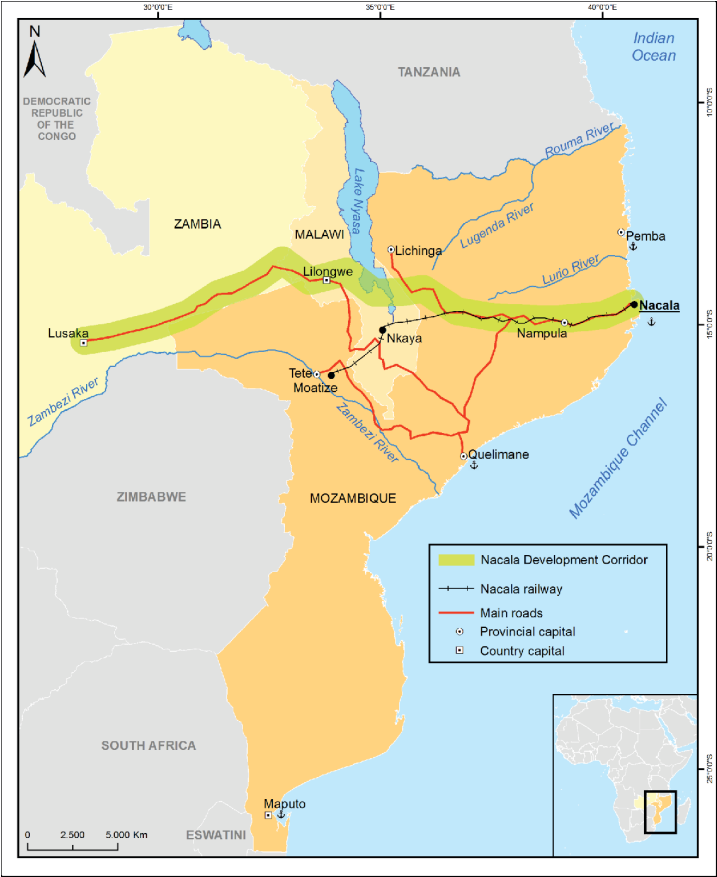
The Nacala Corridor and the Walvis Bay corridors

Corporations which operate in the extraction of natural resources seek to maintain their profits in addition to gaining greater market share by deepening extraction, expanding production and cutting costs as a way to compensate for lower prices. In recent years, projects linked to mining, farming and the extraction of forest resources have followed this logic in the Nacala Corridor and in the Walvis Bay Corridors.

The Nacala Corridor

Historically, during Portuguese colonization, the Nacala Corridor (figure 1) was an important international transport corridor consisting of the Port of Nacala, the Northern Mozambique Railway and the Malawian railway system. In 2002, the Partnership for Africa's Development (NEPAD) was created by the African Union (AU). In 2007, the AU adopted development corridors as instruments for planning business investments on the African continent.

Figure 1 – The Nacala Corridor



Author: Camilo Pereira Carneiro, 2021.

Later, in 2010, the World Bank listed Tete and Nampula provinces as pilot projects. Tete by the boom in the mining sector. Nampula for its potential in manufacturing and logistics. A Special Economic Zone was also planned. In line with the World Bank, the Japanese agency JICA created the Nacala Corridor Economic Development Strategies Project. The project aims at: a) exploration and export of coal; b) exploration of natural gas and production of LNG for export; and c) investments in the Special Economic Zone (GARCIA & KATO, 2016).

Leading actor in the Nacala Corridor, Vale has invested in the mine-port complex with US\$1.9 million for the expansion of the Moatize mine, which includes investments in logistics that aims to double the railway to 912 km, connecting the mine to the port of Nacala, which will have the capacity to export 18 million tons of coal per annum (MABUCANHANE, 2018).

With regard to agriculture, the Nacala Corridor has an appropriate climate for specific types of agricultural production (EMBRAPA, 2012) and for its large arable area of 14.2 million hectares, which enables its full mechanization. In addition, nearly 3.5 million people live in the area, mostly small farmers.

Regarding agriculture projects in Africa, during the Lula da Silva governments (2003-2010) and the first Dilma Rousseff government (2011-2014), Brazil was present in countries like Mozambique through initiatives implemented based on parallels of knowledge generated in Brazilian territory. In this sense, the Embrapa-Mozambique project was concentrated in the Nacala Corridor, due to its similarities with areas of the Brazilian Cerrado, which record high productivity (BATISTELLA & BOLFE, 2010).

In 2009, Brazil, Japan and Mozambique signed a trilateral agreement to invest in the agricultural development of Mozambique's savannah, specifically in the 10 million hectares of the Nacala Corridor. Both governments created the program ProSavana (FERRANDO, 2015). The ProSavana area covers 19 districts in three provinces: Nampula (10), Niassa (7) and Zambezia (2). Two public institutions from Brazil, the Brazilian Development Agency, and Embrapa participate in ProSavana and receive financial support from the BNDES. Nacala was announced by Brazilian authorities as the inductor of the internationalization of Brazilian agribusiness (MABUCANHANE, 2018).

According to Kato (2019), in recent years, in the Nacala Corridor, development projects have been based on the exploitation of resources and the promotion of large-scale agriculture. Despite the

benefits to Mozambique's economy announced by official propaganda, a number of foreign companies, some in collaboration with local businesses linked to members of Mozambique's ruling FRELIMO party, have acquired large areas of farmland in the Nacala Corridor and have displaced thousands of peasant families. The governments, companies and agencies promoting ProSavana and the other projects in the Nacala Corridor maintain that local farmers will benefit from the new investment, infrastructure and access to markets. They also say that peasants will not be displaced from their lands to make way for corporate farms. Nevertheless, these projects are already encouraging land grabbing in the Nacala Corridor (UNAC & GRAIN, 2015).

According to Zaehringer Atumane, Berger and Eckert (2018), the large-scale investments on agriculture have impacted poorly upon small scale farmers and the environment. In Mozambique's districts of Guruè and Monapo (both located in the Nacala Corridor area), a land use change assessment, between 2000 and 2015, demonstrated that extensive agriculture has caused direct and indirect deforestation.

Kato (2019) claims the Nacala Corridor has operated as a privileged space for the articulation and convergence of the interests of national and international actors, highlighting the role of the Mozambican State. Investments in the construction of logistic megaprojects, in addition to their direct effects, prepare the ground for the expansion of agribusiness and for the advancement of giant mineral exploration ventures, in a dynamic that expands the frontiers of unequal and concentrating capital accumulation.

Critics of the projects financed by the BNDES in Africa claim that the presence of large Brazilian companies on the continent reproduces a global logic, which privileges the interests of large capital. In this sense, a mining company like Vale, with public data in hand, installs itself in the form of an enclave, in a vertical process in which the national and regional scales reaffirm the power of

multinational companies by provide its insertion in the territories of the deposits (ANTONINO, 2017).

The Walvis Bay Corridors

The Walvis Bay Corridors are an integrated system of tarred roads and rail networks – accommodating all modes of transport – from the Port of Walvis Bay (Namibia) via the Trans-Cunene, Trans-Caprivi, Trans-Kalahari and Trans-Oranje Corridors providing landlocked Southern African Development Community (SADC) countries access to transatlantic markets (figure 2). Cargo offloaded at the Port of Walvis Bay and then makes its way from the Port along one of the Corridors across Namibia and into neighboring SADC countries (SAIIA, 2021).

Figure 2 - The Walvis Bay Corridors



Author: Camilo Pereira Carneiro, 2021.

In order to enhance the port of Walvis Bay for SADC trade, the Walvis Bay Corridor Group (WBCG) was established in 2000. The initiative increased the importance of Walvis Bay Port and boosted the potential of the corridors linked to it. The Walvis Bay Corridor Group's is structured as a unique public-private partnership (PPP) of transport and logistics stakeholders from both the public and private sectors (SAIIA, 2021).

In 2012, with a focus on relationships and partnerships in the Brazilian market and in Latin America at large, the Walvis Bay Corridor Group (WBCG) opened an office in Sao Paulo. The office was created to direct exports of Brazilian commodities from sectors such as food, mining and oil to the African continent to the port of Walvis Bay. The first direct shipping line started in November 2012. This Santos-Walvis Bay direct shipping line was created to increase the trade volumes between Namibia and Brazil, and to benefit landlocked SADC member states.

In turn, in 2013, BNDES opened a representative office in South Africa, which demonstrates the importance of the SADC countries and the Walvis Bay Corridors in enhancing economic and political connections with Brazil. The necessity to build roads, railways and other transport, energy and communications infrastructure in the Walvis Bay Corridors justified the BNDES' support for Brazilian civil construction companies in their projects in Southern Africa.

From 2002 to 2015, mostly engineering companies engaged in infrastructure projects in Angola: Camargo Corrêa participated in 7 infrastructure projects, Andrade Gutierrez in 12, Odebrecht in 34 and Queiroz Galvão in 15. Between 2002 and 2016, BNDES contracted US\$4 billion in loans with Angola, mostly for Odebrecht projects.

According to Alencastro (2020), Odebrecht was not just acting according to the profit logic in its business in Angola. Partnerships with local companies did not bring financial or technological benefits. They simply served to allow the inclusion of local oligarchies,

a condition for obtaining lucrative contracts with the public sector. Odebrecht actively participated in the Angolan government's political project, advising on the formulation of public policies and even on President José Eduardo dos Santos' election campaign in 2012. For the contractor, investment in Angola has always depended on the perpetuation of the power of the local political class.

Conclusion

The South-South cooperation initiatives carried out within the framework of Brazilian foreign policy under the Lula da Silva administrations and the first Dilma Rousseff administration played a relevant role in the country's arc of international actions. This movement was due to the new multilateral international situation that began in the 1990s and the country's type of international insertion, as well as the rise, within the Ministry of Foreign Affairs, of the autonomist current of Brazilian diplomacy.

In this context, one of the main instruments of Brazil's foreign policy was the state bank BNDES. The Brazilian state bank then began to increasingly finance exports of Brazilian goods and services, and then support direct investments made by Brazilian-owned companies abroad. Through support to foreign trade and by internationalization of Brazilian companies, many resources were directed to Latin America and the African continent.

Regarding the impacts of projects financed by the BNDES in Southern Africa, during the period in which the BNDES financed Brazilian companies on the continent, civil construction was the sector that generated the most jobs. However, despite being a highly labor intensive sector, this sector generates low-skilled and low-wage jobs. Thus, the projects supported by BNDES were not enough to change the poverty levels of the countries where they were carried out. On the other hand, over time, Brazilian contractors with large works

and large BNDES financing began to influence the political life of the countries where they were established. This situation was evidenced in the case of Odebrecht in Angola.

With regard to Brazil's investments in the Nacala Corridor and in the Walvis Bay Corridors in the recent past, critics claim that before breaking with neoliberal evolution, the projects supported by BNDES brought a new variety of capitalism with a high degree of structuring within the same neoliberal order. Between 2003 and 2014, there was a relationship of interdependence between the Brazilian foreign policy of cooperation and investments. By logical deduction, it is understood that since African countries received help, technical and financial assistance and investments from Vale, Odebrecht, Andrade Gutierrez and Camargo Corrêa, the Southern Africa market has opened up to other projects such as in the field of agribusiness, for example.

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COLLABORATIVE POLITICAL GEOGRAPHY OF INDIGENOUS STRUGGLES: CONFLICTS AND MULTI/TRANSTERRITORIALITIES OF R-EXISTENCE ^{1 2}

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Introduction

The land is sick, the land cries. We need to take back our land to recover our existence with nature. (Guarani and Kaiowá leader from the Laranjeira Ñanderu camp, at the margin of the BR-163 highway, Rio Brilhante, Brazil, 2011).

1. This text was originally published in: Geografia Política colaborativa das lutas indígenas: conflitos e multi/transterritorialidades de r-Existência. **Revista Conhecer: Debate Entre O Público E O Privado**, 12(29), 2022, p. 114–140. Available in: <https://doi.org/10.32335/2238-0426.2022.12.29.8551>

2. My acknowledgment to Rosânia Oliveira do Nascimento, doctoral student in the Graduate Program in Social Anthropology at the National Museum of the Federal University of Rio de Janeiro (MN/UFRJ), for the interlocution and valuable contributions to this article, and to the members of the Núcleo de Pesquisas sobre Território e Fronteira (NUTEF), for the permanent stimulus to collective critical reflection and political engagement. This text, on collaborative and engaged Political Geography with indigenous peoples' struggles, is inspired by the dialogue with Nascimento (2019), Perin (2021) and Ramos (2007).

The debate about the processes of deterritorialization and reterritorialization that involve the original peoples, i.e., about the recreation of socio-environmental spaces of practices, struggles and r-Existences (existing to resist as indigenous people) for the re-appropriation of traditional territories, is, one can affirm, in *Abya Yala*³ / Latin America and particularly in *Pindorama/Brazil*, one of the most fruitful in the last decade. This debate attributes a stimulating and intercultural dialogue in Geography - and, in this article, particularly in Political Geography - in the sense of becoming collaborative with the social struggles of indigenous peoples. Such dialogue, even if sometimes not made explicit, makes it possible to establish a good encounter between Political Geography and indigenous peoples in the construction of readings and interpretations rich in alterity, open to difference and outside the box, with native ontologies that say a lot about cosmopolitics⁴, other ways of living, thinking, feeling and being in the world(s)⁵.

3. The Kuna Indians of Panama propose the original term *Abya Yala*, which means "Mature Land" or "Living Land", as a designation for America. Although the term Latin America is inappropriate, it is worth recognizing that from this decolonial space each indigenous group shapes in some way its own world, its universe, and its cosmology. If, on the one hand, Latin America has a slave, patriarchal, and colonial heritage, on the other hand, it presents the power of biodiversity and the secular resistance force of ethnodiversity. Therefore, each geographic context carries a historical burden and a combination of elements that further complexify what we call coloniality.

4. Cosmopolitics is, for indigenous peoples, what, in part, Westerners think of as politics. This political field involves the forms of indigenous struggle (between worlds) and r-Existence in contemporary times. The struggles of these peoples are situated between their worlds and the white world. They are thus situated in the realm of cosmopolitics (TIBLÉ, 2013).

5. We start from these native ontologies that are linked to the experiences, the struggles, and the r-Existences (existing to resist) of the indigenous peoples and territories - victims of the colonial process - but, obviously, without giving up the critical thinking that helps us in the task of decolonization (from the minorities, from below), of power and knowledge in the struggles for justice and social emancipation. More than resuming or creating new canons - decolonial libraries -, it is essential to bring out and echo the multiplicity of memories, voices, and practices of social struggles.

In the accumulated tradition, Political Geography (AGNEW, 1994; AZEVEDO et al., 2021; CASTRO, 2005), as well as other Social Sciences, can promote an intercultural debate (WALSH, 2009)⁶ with Latin American critical social thought. Latin American critical Political Geography interested in indigenous struggles and their forms of territorial organization should maintain an open dialogue with the peoples, in their territories of struggles. From the perspective of a science of techniques that reads space as an “inseparable set of systems of actions and systems of objects”, as proposed by the geographer M. Santos (1996), we emphasize the spatial dimension of coloniality through indigenous geographies that intersect environments and societies, species collectives and worlds, humanities and territorialities, through devices, geostrategies, decolonizing and subversive practices. For this, it is necessary to read space as the sphere/condition of multiplicity and heterogeneity, as proposed by the geographer Massey (2005), recognizing in spatiality the lived and the symbolic in practices that involve culture, cosmopolitics, ancestry, spirituality, and life stories.

It is essential to resume, in part, Deleuze and Guattari's (2008) proposal of *smooth space* and *striated space*⁷ for dealing not only with the multiplicity of space, but also because this meaning is associated with

6. Walsh (2009) adds interculturality to the epistemic debate as a new way of thinking and building society, in the sense of contesting Eurocentrism and the dualisms of modern coloniality for territorial defense and the existence of other ways of life. Interculturality, thus, is a category of the practice of Latin American indigenous movements.

7. For Deleuze and Guattari (2008), while the *smooth space-time* makes the non-metric multiplicities visible, dimensional, qualitative, accentuated, rhizomatic, of archipelago (islands), of distance and frequency, the *striated space-time* makes the metric multiplicities perceptible, directional, extensive, centered, arborescent, numerical, of mass, of magnitude and of cut. The “smooth space always has a higher deterritorialization power than the striated one” (DELEUZE & GUATTARI, 2008, p. 187), “the more regular is the intercrossing, the more closed is the striation, the more the space tends to become homogeneous” (Deleuze & Guattari, 2008, p. 197). But the authors warn that *smooth space* and *homogeneous space* communicate, insofar as the *striated space* never becomes a *smooth space*, even if in the movement one overlaps the other, it remains different from it. The *homogeneous striated space* will maintain difference from the *heterogeneous smooth space*. One will never be its ideal.

the main contributions of the Latin American decolonial geographic reading, the *body-territory* (HAESBAERT, 2020) or, in the scope of a distinction we propose from the native perspective of the Guarani and Kaiowá peoples, the *tekoha* as territory of r-Existence. In this ontological and heterogeneous composition of multiplicities, it can be said that the Guarani and Kaiowá of Mato Grosso do Sul have their own reading of their territory. This is due to the fact that these people have one of the most pulsating cosmologies in the contemporary world, as a result of the processes of struggle and r-Existence.

In Latin America and Brazil, the indigenous peoples have promoted a true rediscovery of territory - which is related to the geopolitical sense or, when founded, to the area of registration, domain, jurisdiction and territorial expansion of the state, as in the classic conception of the German geographer Ratzel (2011), but also encompasses the sense attributed by the French anthropologist Clastres (1974) of a *society against the state*. Clastres' (1974) contribution to Political Anthropology was in the debate about the conception of power through contact with South American indigenous societies, more specifically with the Guarani peoples, in ethnographic works in Paraguay and Brazil. In his classic book *Society against the State* (CLASTRES, 1974), the author considers that among South American indigenous peoples, power in the state- coercive sense, of monopoly of the use of legitimate violence, does not manifest itself. However, he considers that it is not possible to identify "societies with power and societies without power", since political power would be "universal, immanent to the social" (CLASTRES, 1974, p. 17), and it would be realized both through coercive (command-obedience relationship) and non-coercive modes. Thus, political power as that which involves territory is attributed to a *necessity inherent to social life*. In indigenous societies, in this perspective, a *chieftaincy without authority* - with prestige, but without power and coercive functions.

In our research with the Guarani and Kaiowá peoples of Mato Grosso do Sul, this contribution by Clastres (1974) brings components to the analysis of the singular nature of power in the territorialization of indigenous societies. Therefore, we recognize the meaning of territory that privileges the *multidimensionality of territorial living*, associated with the networks (territorial mesh) that compose territorialities, as proposed by the Swiss geographer Raffestin (1980), up to the relationship of these groups with other ontologies and epistemologies, and the connections with ancestry, history, autonomy, and worlds, as suggested by the Colombian anthropologist Escobar (2018). The diverse forms of decolonial resistance of indigenous people configure, as we will see, other manifestations of territoriality - constructing, in fact, *multi* or *transterritorialities*, articulated at different scalar levels. These multiple territorialities lead us to consider distinct conceptions of territory and power, such as those discussed.

In the opening statement of this article, the Guarani and Kaiowá leader affirms that “*the land is sick, the land cries,*” and associates the retaking of the land of traditional occupation with the recovery of the collective existence with nature. In this worldview of indigenous women, the land is the healing, it is food, a *nurturing mother-land*. For the French geographer Bonnemaïson (1992, p. 77), from the land a people “not only extracts food, but also extracts its powers, its energy, and the quality of its emotions. This inextricable relationship between the land and the people is connected, we can affirm, to ancestry, songs, kinship, enchanted beings and species, practices, struggles, and rights that together make up a territory of r-Existence.

In today’s Brazil, these indigenous lands and territories, historically administered by the state as *peripheries*, claim their place as *ontological and epistemic centers*. Even in a country increasingly built by the extractive violence of the corporate territories of agribusiness and the exploitation of their bodies, indigenous peoples carry the insurrections of secular r-Existence and fight for the demarcation

of their lands. Therefore, in this moment of democratic regression, accentuation of violence and the health crisis of the coronavirus 2019 disease (COVID-19), the struggle for rights, the defense and surveillance of the traditionally occupied territories - such as the Guarani and Kaiowá *tekoha* - prove to be indispensable.

It is in this context that this article evokes territory as a category of practice and device of r-Existence in the multiple contemporary territorialities of the Guarani and Kaiowá. We depart from Political Geography to discuss how the tools of analysis and the spatial practices of r-Existence can become weapons of struggle for social justice. This study consisted of an empirical and conceptual discussion with indigenous territorialities in the Latin American context of struggle for land, bodies and original territories. In particular, we analyzed the ancestral reterritorialization and r-Existence of the Guarani and Kaiowá for land recognition and regularization of the *tekoha*. This struggle for land in Mato Grosso do Sul is an indigenous collective action of decolonization of ancestral territories designated *retake*.

Besides this introduction and the methodological strategy, in this text the results and the discussion are structured in sections: a) *Tekoha* and “good living”; b) Conflicts and r-Existences; c) Land and *tekoha*: the struggle for territory in the face of institutional/state racism; and d) Guarani and Kaiowá multi- and cross-territorialities of r-Existence. In the final considerations, we recognize the importance of a Political Geography that is *collaborative* and engaged with the struggles of native peoples for territories and collective rights.

Methodological strategy

The adopted methodological strategy was inspired by the proposal of Smith (1999), who considers the decolonization of Euro-Westernized methodologies necessary, because they have suppressed and appropriated indigenous knowledge. For this, a political and educational

practice of research with indigenous peoples, against colonialism, capitalism and patriarchy, that *collaborates with* self-determination and demarcation of territories, is necessary.

Here, besides the adoption of native concepts - which have, currently, become “fighting weapons” of the Guarani and Kaiowá -, such as *tekoha*, it proved indispensable to spatialize the ancestral indigenous territoriality (understood as a community of belonging by the multiple r-Existences or ways of being), in order not to reify the territories of these peoples as static in time and defined *a priori* by the limits of the modern-colonial states.

Indigenous territorialities are life projects. That is why it was important to know the indigenous territories, the ways of life, the life projects, and also the r-Existence as a political form. In the forms of self-organization of the communities, not always for resisting for autonomy, but for the right to live freely, to follow life, to create futures. Considering this engaged transit of the researcher, it was essential to bring the ethnography of a field of exploratory character, a sufficiently dense description, in the struggle for land/territory, highlighting the women leaders as exemplary in this process.

The ethnography of the *tekoha* was thus being built by the corporeality of the researcher, contextualized by the trajectory, life and experience in fieldwork conducted since 2009 with the Guarani and Kaiowá in Mato Grosso do Sul. As a geographer, it was important to go through the fieldwork close to the body and corporeality, to analyze the heterogeneity, multiplicity and coexistence of spatialities, as proposed by Massey (2005). In the fieldwork, the corporeality of the researcher is at stake in a space-between-indigenous and non-indigenous, in a border existence (Anzaldúa, 1987), which is established through a close experience of the territories and territorialities of people, through the lived and practices. Finally, it was fundamental to build a fieldwork that serves as a tool to fight for the demarcation of the *tekoha*.

***Tekoha* and “good living”**

The Guarani have in *tekoha* the key space of struggle and catalyst of rights against the racist territories of agribusiness and the modern, colonial borders of the states (Figure 1). *Tekoha* is a dense native concept. In Guarani, *Teko* is “life,” “way of being,” “culture,” and *ha* means “space,” “territorialization.” *Tekoha* designates the territory where the Guarani way of being is territorialized and expressed. It is where life is possible. The territorial dynamics in the *tekoha* and the relations of reciprocity build the life experience of the Guarani. *Tekoha* is a common notion among the Guarani of Brazil⁸, Paraguay, Bolivia and Argentina and expresses their historical process of ancestral territorialization, the “good life” and the “land without evil:

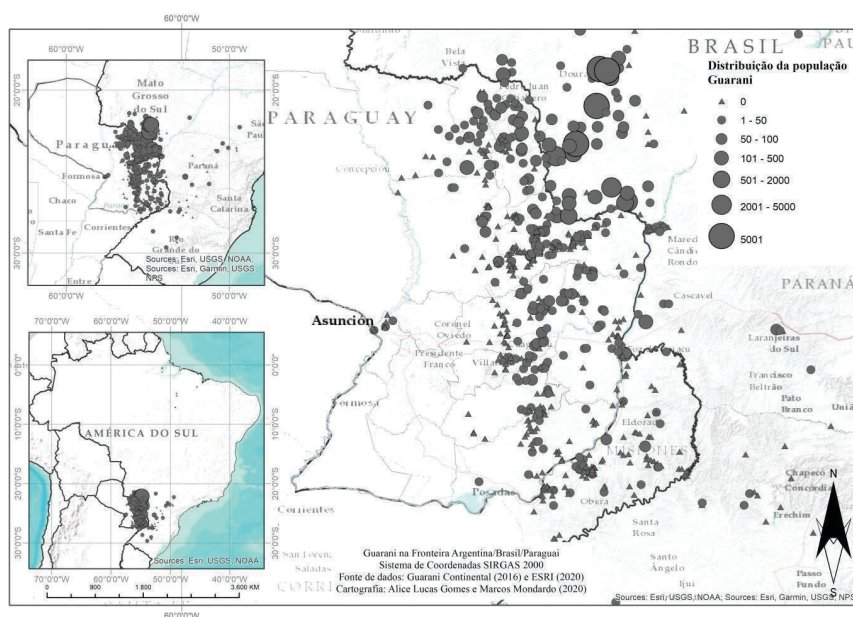
The *tekoha* is to this day, for all Guarani, whether Mbya, Avá-Guarani or Pai/Kaiowá, in Argentina, Bolivia, Brazil or Paraguay, the place of the *teko*, that is, the place of being, of habit and custom, of their own system, of family and politics, of economy and religion. It is the place “where we are what we are. This place is the condition for possibility of *teko porã*, for the good life; this is what colonialization has endeavored to systematically destroy through the usurpation of indigenous territories, environmental destruction, private accumulation of goods, disintegration of the social system, and secularization of the elements of religious life (MELIÀ, 2016, p. 25).

The Guarani were not in the past, nor are they now, nomads. The Guarani are farmers who inhabit *tekoha*. The good way of being, a good state of living, when there is a harmonious relationship with

8. In Brazil, the category of practice seems to have emerged from the anti-colonial struggles as a counterpoint to the advance of the modern agricultural frontier and, starting in the 1970s, it refers to the spatio-temporal dimension (material and symbolic) of the Guarani and Kaiowá’s way of life and won in the Constitution of the Federative Republic of Brazil (CF, 1988) the denomination “traditionally occupied lands. The native category gained a political connotation, in the sense of giving visibility to the struggles that demand the return to indigenous areas expropriated in the processes of exploration/colonization/modernization.

nature and with the members of the community, when there is sufficient food, health and peace of mind, this possible condition is defined as “good living. The “good living” in *tekoha* is formed by *teko porã*.

Figure 1. The Guarani on the border of Brazil and Paraguay.



Source: Prepared by the author.

The “good life” is a plural concept that emerges especially from indigenous communities. The term *buen vivir* comes from a Quechua term, *suma kawsay*. For decades, this alternative to the economic development model has inspired and mobilized anti-hegemonic and counter-hegemonic movements in Latin America. If before this expression was circumscribed to the philosophy and practice of the Andean peoples, since the late 1980s and early 1990s, with the struggles and demands of indigenous peoples that provoked the rebirth of a new Latin American constitutionalism (SVAMPA, 2016), this idea-force has gained visibility, political body, and resonance of greater

expressiveness and reinvindication of indigenous leaders throughout the American continent.

Currently, the concept and practice of “good living” has been mobilized in discourses of indigenous leaders, politicians, and social movements, among others, as a way to elaborate an alternative to the idea of capitalist, extractivist, neoliberal, and anthropocentric development formed through the arbitrary and dichotomous practice that separates humanity from nature.

Acosta (2012) considers that by mobilizing this concept, what is proposed is a move away from the logic of “living better” adopted by capitalism- understood, in a sense, as the alleged freedom of a society to consume more and more in a market economy, to the detriment of the impoverished majority-to adopt the logic of “living well” as the right of all to subsistence, to dignity, to land-territory (Chamorro, 2008). This concept also presupposes a way to break with the opposition and boundaries between nature *versus* culture, to thus incorporate the nature of rights. In the words of Acosta (2012, p. 210):

[...] the ancestral peoples and nationalities of *Abya Yala* are not the only bearers of these proposals. *Buen Vivir* is part of a long search for alternative ways of life forged in the heat of humanity’s struggles for emancipation and life. Even in circles of Western culture, several voices have been raised, and for a long time, that could be in some way in tune with this indigenous vision, and vice versa. The concept of *Buen Vivir* not only has a historical anchorage in the indigenous world, but it is also supported by some universal philosophical principles: Aristotelian, Marxist, ecological, feminist, cooperativist, humanist... Moreover, the world is slowly realizing the global unfeasibility of the dominant lifestyle. *Buen Vivir*, then, projects itself as a platform to discuss urgent responses against the devastating effects of climate change on a planetary level.

The struggle for rights mobilizes concepts such as equality, justice, and autonomy. The mobilization of territorial memory, ancestry, and enchantment is one of the pillars for the recovery of traditional

territories and community management. Such elements allow the reconstruction of territorial links capable of intertwining cosmovisions, in order to articulate and strengthen territories and territorialities. The “good way of living” is also, in this sense, a way of giving new meaning to the relationship of the people with the territory where they live and of rethinking/recovering/reconstructing social, work, education, and food practices and relationships, among others. In other words, the “good living” is constituted as a horizon for making the political or cosmopolitical struggle in the face of conflicts and through r-Existences.

Conflicts and r-Existences

According to Gilmartin (2009, p. 227), in general, “conflict results from the pursuit of incompatible goals by different people, groups, or institutions. Conflict can take a variety of forms, and may include violence.” For the author, “political geographers generally focus on three main causes of conflict: territory, resources, or ideology. In many cases, conflicts result from a combination of these three factors” (GILMARTIN, 2009, p. 228), at various spatial scales.

In the field of traditional Political Geography, particularly geopolitics, conflict has focused on the study of wars. However, in addition to forms of direct violence, Gilmartin (2009, p. 227) also identifies other forms of violence, notably structural and cultural violence. Direct violence involves murder, mutilation, detention, or expulsion. Structural violence encompasses exploitation or marginalization, through, for example, poverty. Cultural violence is what blinds us to direct or structural violence, or seeks to justify it. The focus on the political geographies of conflict is important, but it often comes at the exclusion of other forms of conflict, such as interpersonal (and intrapersonal) conflict - which may or may not be violent.

Ultimately, according to Gilmartin (2009, p. 228), conflict can also “be a catalyst for beneficial change,” which involves overcoming crises

and instituting peace. It is essential to see, in political struggle, the dimension of conflict, because people/peoples are suffering from violence, but they also want peace. However, more recently, “geographers have identified ethnicity as a common cause of conflict, particularly in civil wars, although some [...] suggest that economic factors generally underpin most ethnic conflicts” (GILMARTIN, 2009, p. 228).

Agnew (2002) points out in this direction that globalization, global migration, the weakening of “strong states,” the growth of supraregional and global forms of governments have resulted in increased ethnic and regional conflicts within and between states. The relationship between the nation-state and globalization has thus received particular attention regarding conflicts and ethnic minorities.

According to Giraldo (2022, p. 11, our translation), in the field of political ecology, conflicts occur when there is a clash between different collectives, when there is a conflict between different collective agreements about what “exists in the world and its conditions of existence.” For Escobar (2018, 2019), this conception is important for understanding conflicts between different ontologies when they arise from territorial disputes, especially when they involve conflicts in the spatio-temporal contexts of indigenous peoples. These authors have insisted that in many of these conflicts associated with the investments and projects of big capital, in the dynamics of capitalist accumulation, there is something deeper than conflicts about “natural resources,” “socio-environmental conflicts,” “ecological conflicts,” “ecological-distributive conflicts,” or “ecological justice conflicts,” as proposed by political ecology.

Currently, to the processes of *accumulation by dispossession* (HARVEY, 2004), the object of dispute is the “distribution of scarce natural resources,” such as land and water, among others, and this conception is not only valid for one of the ontologies in dispute. In many cases, as Giraldo (2022) considers, ontologies that see their worlds and conditions of existence threatened by investments or large capitalist

projects, and not considering “only” the human components, but there are other elements at risk, such as sacred relations with the territory and deterritorialization for other types of beings that inhabit that portion of space.

To speak of conflicts between worlds is also to speak of a secular war that the peoples of *Abya Yala/Latin America* and *Pindorama/Brazil* live. According to Giraldo (2022), for these peoples the systematic process of annulment of alterity and ontological occupation is what repeats itself like an eternal *déjà vu*. For more than 500 years, the peoples have been subjected to a technology of governance that consists of installing the ontology of the dominant in their territories, while subsuming their local worlds to the colonizer’s deontologizing project. It corresponds to an ontologizing technology exacerbated in the current dynamics of neoliberal globalization, legitimized by the promise of development.

This promise of development, through rationalism, promoted the rupture between man and nature. Such fragmentation is a principle for the teleology of growth, progress, and dis-involvement. Faced with environmental degradation, the indigenous peoples decided not to embark on the “dribble boat” of progress, to “convert to negationism, to accept that the Earth is flat and that we must continue devouring ourselves,” as the environmentalist and indigenous leader Krenak (2020) warns. The original peoples decided to follow the tracks of involvement, as part of human and non-human nature and by their own differentiated cosmologies in which the Earth is their mother⁹.

For Giraldo (2022), at the center of the conflicts, which are established in asymmetrical power relations, we find reality and the

9. The planetary crisis we face with the pandemic is a systemic crisis that has placed at a civilizational crossroads the modern promises of humanization: the teleology of growth, progress, development and neoliberal rationality, that is, the direction of modernization. Therefore, modern reactionarism, reactionary negationism, demonstrates the worlds that have failed to detach themselves from these promises (LATOUR, 2020).

differences in cultural perspectives, because, as we know, what exist are plural realities, multiple worlds: a pluriverse that clashes with the megaprojects and interventions of the progress of the dominant ontology. These other realities, denied by modern ontology, cannot be understood by the hegemonic ontology. Thus, it cannot be understood with the distinction between “nature” and “culture,” nor with the separation between “human” and “non-human,” because, for many, they are relational ontologies. For many relational ontologies - such as those discussed in this article -, indigenous territorialities are composed of a constellation of different beings, such as animals, plants, lands, rivers, and other soul entities, that inhabit the soul of places and territories.

This is the conflict context in which the unique struggles of indigenous peoples are fought. Social/territorial struggles that highlight that what is at stake is more than distributional conflicts involving natural resources. It is distributional conflicts involving natural resources and what these communities are defending in their territory. What these communities are defending is the relationality of their life worlds. A conflict between modernity and relational ontologies, in which indigenous peoples react not only by resisting, but by constructing their own ontological project (GIRALDO, 2022).

These apparent processes of resistance are, in fact, of r-Existence, in the sense attributed by Porto- Gonçalves (2002), of resisting to exist as culturally and territorially differentiated peoples. This r- Existence can be interpreted as an analytical and decolonial key to understand the collective social practices that have been constituted as fundamental in the reinvention of existence: “they are new epistemic territories that are having to be reinvented along with the new territories of material existence,” in short, “they are new ways of signifying our being-in-the-world, of graphing the land, of inventing new territorialities - of geo-graphing” (PORTO-GONÇALVES, 2002, p. 226). Thus, the term r-Existence is proposed by Porto-Gonçalves (2013, p. 169,

our translation) to highlight that “more than resistance, which means resuming a previous action and, thus, is always a reflex action, what we have is r-[E]xistence,” that is, “a way of existing, a certain matrix of rationality that acts in circumstances, even re-acts from a *topoi*, in short, from its own place, both geographic and epistemically. In fact, it acts between two logics” (PORTO- GONÇALVES, 2013, p. 169).

Therefore, these r-Existences - such as those of indigenous peoples - involve the re-creation of practices, educational processes, transmission of knowledge, and conceptual, linguistic, and ontological devices. This mode of existence is important for building strategies and tactics of struggle for and in traditional territories, in the re-elaboration of knowledges, worlds of human and non-human lives, and old and new territorialities that oppose the hegemonic ideologies/ logics of capital accumulation. In our study, as we will see, the current processes of *accumulation by dispossession* (HARVEY, 2004) are in fact the unfolding of a permanent conflict and territorial tension that the Guarani and Kaiowá peoples face historically and geographically.

Land and *tekoha*: the struggle for territory in the face of institutional/state racism

A. B. Santos (2015, p. 121), argues that “land is a universal patrimony, therefore, privatizing it is an attempt against life. From this perspective, land should not be object of purchase and sale. In Mato Grosso do Sul, the State, farmers, corporations, militias, and *agribusiness*, for example, attribute to the land commodity value, obtained throughout the 20th and early 21st centuries of exploitation/spoliation, and responsible for the expropriation of indigenous eldership, religiosity, and labor inseparable from the land-territory. A. B. Santos (2015, p. 30), insists that Afro-Pindoramic populations “tend to organize in a circular and/ or horizontal manner,” thus, the boundaries of traditional territory are demarcated by the “ability to cultivate and share” collectively.

For Dardot and Laval (2015, p. 262), “far from being an essence or a nature, property is nothing but a certain legal arrangement of social relations that has evolved over time.” Therefore, with “private property” “exclusion becomes right”. As the authors state, “in 1840, Proudhon made his critical principle a *slogan* that became famous: ‘property is theft’” (DARDOT & LAVAL, 2015, p. 261). Thus, as they warn, the *commons* currently introduce a salutary renewal: “with the commons, it is no longer a matter of simply opposing private property and public property, but of practically and theoretically questioning the foundations and effects of property rights, opposing them to the social imperative of common use” (DARDOT & LAVAL, 2015, p. 262).

“For the Guarani and Kaiowá the *tekoha* is sacred” because their territory is non-negotiable. In this cosmology, the value of use is not suppressed by the value of exchange. About this, the Guarani Martins (2006, p. 145), from the Porto Lindo village in Japorã-MS, states that:

[...] to speak of the space is to say that the land will serve to pass on everything that we have, according to our vision, to the children, and also to teach the children that the land is not for us to come and stay there and then say that this land is no longer worth it and we will sell it. The intention, the thought, according to the cacique and the healer, is that the land is not for us to sell. Where are we going to go if we sell the land? [...] What is important for us is that we are going to maintain our way of being [...] What will be important for us is to occupy that land that is ours. Because if we don't occupy the land that was traditionally ours, it will harm us, because from the land comes our cultural strengthening, which is culture. The land is already traditionally ours, the *Yvy Katu*. And if *Tupã*, the God, helps us with the prayers and with our strength, we will be there guaranteeing with our effort and with the help of the laws, we will be gaining more space, which was ours before.

What is lived, the dwelling with the land, has an ancestral value and a collective belonging, in the inseparable relationship of their way of being (*teko*) with the land-territory. To understand the current

meanings in which the term *tekoha* is used or mobilized by the contemporary Guarani and Kaiowá, we must first clarify how and in what spatial-temporal context the notion of *tekoha* was forged. In the Brazilian state of Mato Grosso do Sul, on the border with the Republic of Paraguay, this modern-colonial condition of denial of otherness and usurpation of indigenous territories was not different from the rest of Brazil and Latin America. What is different today and what leads human rights scholars to state that the Guarani and Kaiowá peoples live a humanitarian crisis is the density of violence of extractive dispossession and socio-territorial conflicts that persist until today. Therefore, in this piece of deep Brazil are some of the most difficult conditions of existence for indigenous peoples and where, even today, the bloodiest territorial conflicts are located by the alarming indicators of murders¹⁰ and suicides¹¹.

The precarious situation to which these indigenous peoples have been subjected in Mato Grosso do Sul is symptomatic of this struggle. Throughout the 20th century, a logic of striated space developed, of “confinement” and territorial containment imposed on

10. Taking the accumulated and detailed data from the Reports of the Indigenous Missionary Council as a basis, Mondardo (2018, p. 70) states that “Dourados, the second largest municipality in the state in population numbers (220,000 inhabitants in 2018, according to the [Brazilian Institute of Geography and Statistics - IBGE]), and where the most populous indigenous reserve in Brazil is located (15,023 indigenous people inhabiting an area of 3,474 hectares), stands out in the cases of homicides of Guarani and Kaiowá indigenous people. Of the 400 murders registered in the state by CIMI reports, 164 occurred in Dourados. This number refers to 41% of the Guarani and Kaiowá deaths in the entire state in the analyzed period (2003 to 2017). These deaths also correspond to 37.7% of the total number of murders of indigenous people in Mato Grosso do Sul and 19% in Brazil as a whole. The figures also show that on average almost 11 indigenous people are murdered every year in the municipality of Dourados.

11. On the high suicide rates among the Guarani and Kaiowá, Staliano et al. (2019, p. 19), reveal in their research that “the majority of indigenous people who commit suicide are young adult males, with higher concentrations in the indigenous reserves in two municipalities in the state: Dourados (40%) and Amambai (21%). Suicide by hanging (*jejuvy*), an ancient practice among the Kaiowá, is the most evident category (95%), followed by two other far less common forms, suicide by firearm (3%) and by poisoning (2%).

these peoples by the colonial biopolitics of the modern State. In Mato Grosso do Sul, the territorial expansion of capitalism, under the aegis of “creative destruction on land” that “produced what is sometimes called ‘second nature’-nature reshaped by human action” (HARVEY, 2011, p. 151), occurred in the early twentieth century, due to the accumulation by dispossession and expulsion of indigenous peoples from their original territories in extractive fronts of yerba mate, through the directed colonization of the Estado Novo (1937-1945), of the Getúlio Vargas government, “Marcha para o Oeste”, until the territorialization of the agricultural frontier, from the 1970s, with the implementation of agribusiness. These colonization fronts updated capitalism and patriarchy in this striated space through “internal colonialism” (GONZÁLEZ CASANOVA, 2006)¹².

Throughout the 20th century, extended families and/or relatives of the Guarani and Kaiowá were expelled and dispossessed of their *tekoha*. Between 1915 and 1928, the Serviço de Proteção aos Índios (SPI) created eight small areas - indigenous reserves -, reterritorializing the indigenous people from their *tekoha*¹³. With this territorial device, the Brazilian state carried out the “dispossession” (HARVEY, 2004) of indigenous lands, freeing them for the expansion of colonial, extractive, colonizing and modernizing occupation fronts. Guarani Ñandeva, Kaiowá, Terena and Bororó ethnic groups were compulsorily displaced.

In the 1960s, indigenous peoples who resisted reservation status continued to be expelled from their *tekoha* to produce benefits for the territorial expansion of modern agriculture, with the beginning of the agro-industrial phase. This new land acquisition, since the 1990s,

12. In Mato Grosso do Sul, indigenous peoples struggle against various forms of colonialism: strong, internal, violent, racist, of large concentrations of land and contempt for human life. This matrix of racist power - colonialism - is central to the domination and control of the land by non-indigenous people.

13. During this period the reserves of Amambai (1915), Dourados (1917), Caarapó (1924), Pirajui (1928), Limão Verde (1928), Porto Lindo (1928), Sessoró (1928) and Takuapery (1928) were created, respectively.

began to occur on a large scale through transnational corporations that destroyed local economies and ecosystems of the Guarani and Kaiowá and transformed vast tracts of land - where the *tekoha guasu* (large Guarani territory) existed - into homogenous and hierarchical striated territories of agricultural and corporate production. These corporations from the Global South, soybean growers, mining companies and meat industry, built transnationalized striated spaces and expelled the original inhabitants from their traditionally occupied lands and territories. Several territorial conflicts have resulted from this process.

The conflict between farmers and the Guarani and Kaiowá peoples in Mato Grosso do Sul has taken on multiple dimensions, especially since the 2000s with the measures relating to the demarcation of traditional lands. In this state, the indigenous political and territorial resistance, which began in a collective and organized way in the 1970s, took a fundamental step in 2007 toward the agenda of the struggle for recognition of the territorial rights of these traditional populations, with the publication of decrees by the National Indigenous Foundation (FUNAI), in agreement with the Federal Public Ministry (MPF), and determined the beginning of the process of demarcation and/or land regularization of several *tekoha*. This legal-political act was, however, the trigger for the intensification of territorial conflicts that had already been occurring historically between indigenous peoples and ranchers, which was accentuated by the possibility of a land reconfiguration in the southern cone of the state, which comprises an area on the border of Brazil and Paraguay.

In this new “phase” of the struggle for the identification and demarcation of territories, the Constitution of the Federative Republic of Brazil (FC, 1988) was the crucial juridical-political device for the principle of traditional territorialization. The FC (1988) recognizes the original rights over the lands traditionally occupied by indigenous peoples, attributing to the Union the competence to demarcate them. The Brazilian State, however, has not complied with

the determination in the FC (1988) to demarcate indigenous lands within five years. It should also be noted that since 2016, after the *impeachment* of President Dilma Rousseff, no indigenous land has been demarcated (MONDARDO, 2022).

In Mato Grosso do Sul, due to the socio-territorial violence they have suffered, large families have been forced to live in reserves, which resist on the margins of highways or in areas in the back of farms. A portion of the Guarani and Kaiowá resort to spatial strategies of r-Existence to go beyond or reconstruct an ancestral territorial logic, subverting the reservation condition that was imposed on them. This ancestral territorial logic is related to the spiritual strength of the Guarani and Kaiowá, which manifests itself from the community cosmology in the body-territory relationship, through prayers, songs, dances, and mourning, which connect all the *tekoha* in a social pact to defend the bodies and territories that have been and are being affected by the genocidal actions of the state, ranchers, corporations, and militias.

According to the Brazilian Institute of Geography and Statistics (IBGE, 2010), of the 61,737 *Indios* living in Mato Grosso do Sul, 12,700 are outside the demarcated area and in a vulnerable situation of conflict in the rural zone. According to Benites (2014), of the 41,500 Guarani and Kaiowá in the state, approximately 15,000 indigenous people are fighting to recover their *tekoha*. Currently, the *Kuñangue Aty Guasu* (Assembly of Guarani and Kaiowá Women) states that 51,000 indigenous people live in the southern cone of the state. Some indigenous leaders claim that 20,000 indigenous people are fighting for the demarcation of territories of traditional occupation.

The Indigenous reservation, this territory defined and delimited by geometric boundaries, was created by non-*Indios*, that is, by the State. However, the indigenous people began to rework this conception and practice when they came into contact with the whites, because the demarcation needs to border their territory. The arrival of the fence on the properties established a lot of violence to the

Indios. The fence is the symbol of the institutional power of private property and the state. However, the indigenous boundary is not that of the geopolitical border, but the language that the state (re) knows is the demarcation of the territory by the closed and exclusivist type of zone of clearly delimited boundaries. Indigenous peoples have come to recognize that the space of the boundary, of the fence, is necessary to delimit a land. Thus, the category of *tekoha* mobilized in the struggles produced a fertile field of experimentation for thinking about transits between practices and conceptions, so as to provide body and corporeality to the lived (embodied) geographies and the circulations of the Guaraní and Kaiowá peoples in their engagements with worlds, or on the basis of comparisons between indigenous and non-indigenous worlds. The “walk,” *oguata*, is the Guaraní territoriality that involves their spatial mobility, the transiting through traditional territory and between territories.

The struggles and engagements in everyday spaces involve shamanism. The shaman is the cosmic center that rules an indigenous people. The shaman is formed within the territory and incorporates the “actant” territorialities (Latour, 2004), for example, beings, human and non-human, rocks, plants, the mountain, animals. Therefore, the *tekoha* is territorialized into “land,” “nature,” “place,” “area,” or “space,” but in the practices and engagements it is forged at other scales, articulating and modulating other clippings - objects and actions - as it relates to other subjects of the animist and earthly worlds. Through the knowledge and practices produced in engagements, situated and in transformation (Haraway, 1995), the *tekoha* is mobilized in repossession camps, in temporary occupations of highways, in claims at universities, in demonstrations at public agencies. The territorial subjectivities of the indigenous people who inhabit and live in the paths as “rhizomatic spaces-in-networks” - as a horizontal network of lines, flows, and relations, as proposed by Deleuze and Guattari (1995) - are being expanded and reelaborated.

For indigenous peoples, it is necessary to carry on the struggle of their ancestors, incorporating ancestry as a founding dimension of the territorialities that make up this potential of r-Existence. Ancestry as a native category is associated with territoriality and indigenous resistance. Ancestry is a relation of consanguinity (blood relations of father and child, mother and son, cousins, among others). For the Guarani and Kaiowá, ancestry is associated with the traditional, religious and political leaders, *Nhanderu* and *Nhandesy*, such as the ritual religious ceremony of the *Xiru Marangatu Nhemongarai*, baptism of a sacred artifact. In this ritual-space the *Xiru Marangatu* is handed over to the religious leaders. This sacred artifact will be used, for example, in the prayer houses, *oga pysy*. Thus, the ancestors of the Guarani and Kaiowá guide the way to follow and the means to retake, recover, and reopen the *tekoha*.

The indigenous peoples involved in this movement for the decolonization of their territories have a trajectory of struggle for rights, guided by their own cosmologies and cosmopolitics and differentiated among themselves, in mobilizations, demonstrations, and repossessions. According to Benites (2014, p. 25), the processes of retaking territories in Mato Grosso do Sul have been carried out since the 1990s. The retakings of their territories involve “articulations of the political (*Mburuvicha*) and spiritual (*Nhanderu*) leaderships of the Guarani and Kaiowá extended families. These areas result from the territorialization dynamics that the Guarani and Kaiowá have experienced since the colonization process and the creation of indigenous reserves. The retaking of *tekoha* is a form of political collective action that, over the last few decades, has become a symbol of indigenous mobilization, and has become the conduct through which indigenous people “apply pressure” to effectuate the demarcation process of the required indigenous land. In this way, the territorialities of the Guarani and Kaiowá move toward the

“land-without-evil”¹⁴ the “good life”, *teko porã*, *nhandereko* (our way of being and living), as described by Melià (2016).

The search for the autonomy of territories through dissident practices (not normalized by the colonial-modern logic) goes through the project-actions of self-determination and r-Existence in favor of their own modes of sociopolitical, spatial, and cosmological organization, in the struggle of the peoples for their rights. In the name of traditional territory, the *tekoha*, the Guaraní and Kaiowá peoples fight for the defense and conquest of rights. The *tekoha* incorporates the dimension of a material and political device for the struggle for rights. It thus encompasses the environment, the ecosystem, in the sense attributed by the indigenous point of view, of the inseparable or *continuum* between the people and the *environment* (“*milieu*”). This relationship between land-body-territory occurs through multi-/ transterritorialities of r- Existence.

Guaraní and Kaiowá Multi-/Transterritorialities of r-Existence

How do the Guaraní and Kaiowá peoples build an experience of multi-/ transterritoriality in Mato Grosso do Sul through practices of struggle and r-Existence? Why is this rhizomatic, multi-dialogic territorialization a “spatial asset”, in Ma Mung’s (1999) terms, that allows these peoples to play with the spaces, articulating in network reserves, villages and camps, for the construction of “equivalent smooth spaces”? How is this multi-/ transterritoriality formed that allies territories-area and territories-network? How can we think about the relationship between indigenous peoples and the borders of state territories?

14. According to Melià (1990, p. 33), “the search for the land without evil is [...] the fundamental motive and sufficient reason for Guaraní migration. And herein lies the specificity of the economy of the tribes. The land without evil is certainly an essential element in the construction of the Guaraní way of being.

The multi-/ transterritorialities are produced by the conflict of interests and according to distinct territorial logics of appropriation and domination of *smooth spaces* and *striated spaces*, resuming the meaning of Deleuze and Guattari (2008). More than side by side, these territorialities are produced by complex hierarchical and rhizomatic networks of powers and in multiple scales of articulation. The modern-colonial multi-/ transterritoriality of the agribusiness farmers and the r-Existence multi-/ transterritoriality of the Guarani and Kaiowá intersect and are built in interaction, but one will never be the ideal for the other. In the struggles and conflicts on the border there is a power play that allies *homogeneous striated spaces* of the farmers and *heterogeneous smooth spaces* of the indigenous people.

In the struggle for land and territory, the Guarani and Kaiowá indigenous people forge multi-/ Transterritorialities of r-Existence, defining their position of resistance and their own ontology. The collective states, for example, that even if they try to remove them from the area where they are camped, they will resist:

[...] *my grandfather died here and my father also died here. They want to take us away from here again. Do you want to kill more? If we are going to die of suicide, we die resisting, we die inside our tekoha* (Guarani and Kaiowá leader of the Laranjeira Nãnderu camp, on the margin of the BR 163, Rio Brilhante, Brazil, 2011).

r-Existence manifests itself in multiple territorialities of struggle for land, *tekoha*, and human rights. Despite suffering from violence, the indigenous people reaffirm the struggle and the collective organization of the ethnic-territorial movement as a way to maintain the path to recovery of the *tekoha*.

In this territorial conflict, r-Existence is constructed through multiple forms of struggle by the Guarani and Kaiowá peoples. The spatial strategies are not only of confrontation, of direct combat. They are often produced by their own languages, “hidden discourses”, in

subtle and even silent tactics. It is worth to bring into the discussion the analysis of everyday forms of r-Existence developed by Scott (1990). The spatial strategies of insubordination and strategic litigation of indigenous peoples are practiced in work relations, “friendships,” transits, which demonstrate inventive conducts of everyday r-Existence, evidencing alternative forms and, even at a distance, ways of territorializing oneself in the ancestral land. Life as the art of r-Existence of the Guarani and Kaiowá proves to be fundamental for the reappropriation of the flat space, the *tekoha*, and for the production of multi/transterritorialities in peripheral areas, bordering international borders.

In the Guarani and Kaiowá retaking movement, we have identified the recreation of smooth spaces, which the farmers’ actions cannot access or control. These indigenous peoples, in their ethnic mobilizations in the struggle for the *tekoha*, construct smooth spaces in collective forums, such as assemblies, for political articulation and in movements to reoccupy the *tekoha*. From the local scale (such as the reservations and retaken camps) and at the regional scale, with the *Aty Guasu*, the *Kuñangue Aty Guasu* women’s assembly, and even the articulations in Brazil and abroad, indigenous leaders in Mato Grosso do Sul promote the circulation of knowledge, the exchange of information, and political articulations in rhizomatic networks that create flows, subversive lines of escape, in the struggle for land, territory, and human rights.

In the case of the border between Brazil and Paraguay, we see the articulation of these territories being modulated with the subjects involved and the power modalities that are at stake. The Guarani and Kaiowá peoples elaborate an ancestral (trans)border territoriality of r-Existence. However, currently, due to the dimension of the struggle for territory and human rights that the indigenous movement has incorporated in its multiple spatial scales - from the r-Existence of the body to against global warming of the Earth, as Guajajara (2020),

Kambeba (2020), Kopenawa and Albert (2015) and Krenak (2020) have considered - this relationship has been reconfigured around the demarcation and defense of the original territories.

The cross-border relations demonstrate that the official limits of the modern-colonial state have been transgressed or, perhaps, circumvented in the construction of a cross-border condition and, therefore, assuming a dimension of transterritoriality to the extent that it crosses, transgresses, relativizes and plays with both sides of the border, in a transit between territories that is effective, activating and articulating multiple territorialities. The exercise of power as the r-Existence of transiting, constructed by mobility, by coming and going between territories on a transnational scale, is what we call *transterritoriality*. This modality of border territoriality is evoked by the ancestral spatial condition of coming and going. In a certain sense, this possibility complexifies the idea of stable, closed, and exclusivist international borders.

We also identified, through fieldwork, that the Guarani and Kaio-wá peoples, in their movement of r- Existence, experience in their territorialities the art of bypassing the striated spaces of agribusiness in cross-border traffic. Indigenous people in movement build rhizomatic networks and produce a territory- network at the border, connecting, for example, a reserve and/or camp in Mato Grosso do Sul with a reserve in Paraguay. With this, they physically move and spend some months in Paraguay and others in Brazil. In this cross-border transit, they activate the “territories” of the same extended family and, with this, they cross the boundary between the countries, living with their peers on both sides of the border and, in a certain way, ignore or even relativize the limits of the national border. The reverse flow also occurs. There are cases of indigenous people from Paraguay who migrate to reservations or camps in Mato Grosso do Sul to obtain benefits (not always) guaranteed by the Brazilian State to the Guarani

and Kaiowá, such as basic food baskets, medical care (including vaccination against COVID-19 during the pandemic) and education.

Multiterritoriality, however, combines zone-territories with network-territories (HAESBAERT, 2004). It is worth clarifying, in the first place, to whom this contemporary multi/transterritoriality is for, since this experience is not for all the indigenous people who transit this border of Brazil and Paraguay. Secondly, this relationship varies greatly or is modulated according to the cosmology, the extended family (ancestry) and the space - for example, reserve, village or camp - in which the group is in a process of deterritorialization.

The type of “closed reserve”, a territory-zone with a clearly defined limit, was imposed by the State, but the Guarani and Kaiowá never agreed to be subjected to these “striated minimum spaces” or micro-territories. The territorial logic of indigenous peoples is different and mobility, as in the Guarani and Kaiowá cosmology, is a central component for the territoriality of these subjects, with a great need for circulation within a *tekoha* and for relations between territories and extended families. So, how can these indigenous peoples be “confined” by the definition of a compulsory territoriality imposed by the State’s logic of territory-zone? What are these subjects doing in contemporary times to resist such a striated logic of the homogenizing dominant space?

In the r-Existence movement, these peoples build networks and produce a territory-network-rizome on the border, interconnecting, for example, a reserve in the municipality of Dourados with another reserve in the municipality of Amambai. In this way, they move around physically and may spend a few months with their relatives in another reserve, depending on kinship relations, marriages, and political alliances. In this transit, the Guarani and Kaiowá activate the territories of the same extended family and, thus, cross the limits - or live on the limits - of the reserve logic imposed by the state and the farms, in a sense of passage, articulation, and combination,

coexisting with their fellows in both flat spaces and, in a certain way, ignoring or even relativizing, through the lines of escape, the limits of the space-striated- reserve. One cannot forget that this modality of alter-native territoriality - multi/transterritoriality - generates a potentiality in the strengthening of the struggles in the camps of retaken *tekoha*, of the coming and going between or transit between these “equivalent spaces” of articulation and mobilization of dissident spatial strategies.

We understand, therefore, that a portion of the Guarani and Kaiowá peoples’ struggle for territory and human rights is experiencing a multi-territoriality of r-Existence through the articulation of indigenous reserves, lands and camps, which enables a combination of territories-zones, with rhizomatic networks of relationships with agencies and entities such as FUNAI, SESAI, the Indigenous Missionary Council, the Pastoral Land Commission (CPT), public universities, researchers, journalists, activists, politicians (city councilors, deputies and senators), among others. Thus, power relations are constructed against/with/beyond/(d)the state, by both zonal and reticular logics, at multiple scales of interaction, and by flexible and scape territorialities.

Multiterritoriality also manifests itself in a trans-scalar analysis. In the daily life of the Guarani and Kaiowá there is simultaneously a relationship, for example, of more specific components of power interaction, restricted to the group, often to family nuclei, linked to extended families, in some local meetings, or the *Aty Guasu*, the *Aty Jovem* and the *Kunãngue Aty Guasu*, as well as on broader and more integrative scales, regarding the relationship with public agencies such as the MPF and FUNAI, for example. These are different scales of power that overlap and are articulated in intensive rhizomatic networks of political, symbolic, and affective relationships.

Furthermore, at the local and regional levels, we identified that the “matrimonial circularity” is indicative of these transit territories of the

Guarani and Kaiowá. This coming and going is constructed by ethnic and consanguineous ties, by marriages between indigenous peoples, also on both sides of the border. We observe that the matrilocal residential pattern is defined by kinship and consanguinity ties, in which the husband or the newly-married couple moves in with his wife's family or close to it. In this socio-spatial system, marriage prevails in the way the Guarani and Kaiowá organize their space. The family networks linked to the *tekoha* and located within the area of *tekoha guasu*, on the border between Brazil and Paraguay, define the relationships for marriages, including cross-border transits. In these kinship ties, an alternative and subversive multi-/transterritoriality that questions the logic imposed on these indigenous peoples of the closed and exclusivist territory-zone of the modern-colonial state is built.

Through these kinship ties, through the logic of the indigenous residential pattern of matrilocality, this circulation is elaborated through ancestry, not only in relation to the *tekoha*, villages, indigenous lands and retaken camps in Mato Grosso do Sul, in Brazil, but also in relation to other *tekoha* within Paraguay, in a radius of approximately 100 km from the international border. This transit is elaborated by rhizomatic networks and by lines of escape. This cross-border territoriality allows the construction of "equivalent smooth spaces" of shelter, affection, coexistence, kinship, religiosity and political articulation of the struggle and r-Existence movement of the indigenous people.

In the recovery camps of the *tekoha*, many Guarani and Kaiowá, especially the leaders (some "marked to die") make this trans-territorial transit a way to subvert persecution, violence, and even death threats, that is, to resist in order to exist. Trans-territoriality allows for the shelter and protection of the subjects in transit through the equivalent reterritorialized smooth spaces. In addition, the indigenous camps are interconnected and maintain links among themselves and with the indigenous reserves in Mato Grosso do Sul by virtual

networks through the use of cell phones and even, in some cases, the Internet. It is relatively common among the leaders the use of cell phones to contact members of other camps, indigenous reserves, and other links with public agencies, non-governmental organizations (NGOs), politicians, and activists, among others. This allows the circulation of information through virtual networks that articulate the alternative territorialities of these peoples.

This alternative transterritoriality combines multiple scales in area-territories (indigenous reserves and camps in Mato Grosso do Sul, Brazil, and indigenous lands in Paraguay) with networks built through physical mobility, in this “matrimonial circularity” mentioned above, or through virtual networks built by cell phones and the Internet. Such mechanisms of conjugation of scales enable these peoples to interconnect their cross-border territories, which helps in the empowerment of the ethnic group and in the struggle for the demarcation of indigenous lands. This horizontalized network of border flows is combined with zonal territories, such as camps and indigenous reserves, for the recovery of ancestral *tekoha*.

Final considerations

This article problematizes the issue of the struggle for *tekoha*, from a *collaborative* perspective of Political Geography committed to the life and r-Existence reterritorialization of the Guarani and Kaiowá in Mato Grosso do Sul in the context of conflicts and extractive violence. Through the decolonial and intercultural debate, of Indigenous Geography with Latin American critical social thinking, the categories are rethought and articulated in dialogue with native concepts and the multiple territorialities of the Guarani and Kaiowá.

In a first moment, we analyze the relationship between *tekoha* and “well-living”, the conflicts and r-Existences of indigenous peoples, in the Brazilian context of neoextractivism/agribusiness and authoritarian

government. In Mato Grosso do Sul, territorial conflicts and *habitat* degradation of the Guarani and Kaiowá negatively affect the *teko porã* and the cosmology of each people. Besides living crowded into small areas, “minimal spaces,” in the unsuccessful integration policy, these peoples are currently being brutally harassed by the racist state, militias, and farmers. The authoritarian government’s management of the corporate territories of agribusiness, articulated with the ruralist, evangelical, and pro-armaments parties, places life in (and outside) the *tekoha* even more in a condition of social vulnerability.

In a second moment, we identify the *tekoha* as territory of Guarani and Kaiowá r-Existence. As we have shown, in this part of deep Brazil, along the movement of deterritorialization and the process of reterritorialization, we observe some of the harshest conditions of existence for indigenous peoples and where some of the bloodiest territorial conflicts are located because of the alarming indicators of murders and suicides. The defense of the life of the Guarani and Kaiowá, of the body-territory, is only possible with the demarcation of the territories of traditional occupation. The reterritorialization of r-Existence of the Guarani and Kaiowá occurs through the recognition and land title regularization of the *tekoha*. Since the 1990s, the indigenous collective action of decolonization of territories is named and spatially classified as *retake*. The retaking of *tekoha* is a form of political collective action that, in recent decades, has become a geostrategy of indigenous mobilization for the demarcation of the required area. This territoriality is guided by the cosmology of the “land-without-evil,” of the “good life,” *teko porã*, *nhandereko*.

In a third moment, we analyze ancestral reterritorialization through multi-/transterritorialities of r-Existence. The Guarani and Kaiowá peoples are building an experience of multi-/transterritoriality through practices of struggle and r-Existence. Against the denial of rights or the deconstitutionalization of the State and directly against the despoliating, neo-developmental and neoextractivist dynamics

of neoliberal globalization of the Brazilian-Latin American corporate territory, the Guarani and Kaiowá forge other scales of struggle through multi-/transterritorialities. From the local scale (such as indigenous reserves and retaking camps) and on the regional scale, with the *Aty Guasu*, the *Kuñangue Aty Guasu* women's assembly, to articulations in Brazil and abroad, global- transnational, the Guarani and Kaiowá are building a multi-territoriality through a politic of scales coextensive with the relations of reterritorialization of r- Existence, as processes and spatial dis-articulations. From the body, the land, the *tekoha*, the *tekoha guasu*, the camps, the resettlements, the reservations, on both sides of the border of Brazil and Paraguay, in this coming and going or cross-border transit, transterritorialities are remade and scales are constructed by plural powers - concrete and symbolic - by the effective capacity of organization, mobilization, and political articulation in collective and community actions.

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SECTION 3

Territorial management

PUBLIC HEALTH IN BRAZIL: CONFLICTS AND TERRITORIAL DISPUTES

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Introduction: Geographical Strategies of the National Health Policy

Brazil is part of a select group of seven countries which have a universal public healthcare system; these countries include Australia, Brazil, Canada, Cuba, France, United Kingdom and Sweden. Brazil clearly stands out in this select group of countries because it is the country with the highest population and faces an enormous challenge of offering a universal public healthcare system for a population that is roughly 20 times as large as the population of other countries such as Cuba and Sweden. Furthermore, as can be seen in Table 1 below, despite having the highest population in the aforementioned group of seven countries with

universal public healthcare system, Brazil is the country that makes the lowest investment in public healthcare (both in terms of % of GDP spent on health and per capita health spending) and which shows the worst performance in healthcare quality indicators (maternal mortality and hospital beds per thousand inhabitants).

Table 1 - Countries with universal public healthcare system: some relevant data.

Country	Population	Hospital beds/ thousand inhabitants	Maternal mortality/ 100,000 births	Health expenditure (% of GDP)	Health expenditure per capita (US dollars)
Australia	24,598,930	10.8	6	9.4	4,934
Brazil	209,288,280	3.2	44	8.9	780
Canada	36,708,080	6.2	7	10.4	4,580
Cuba	11,484,640	4.4	39	10.9	826
France	67,118,650	6.4	8	11.1	4,026
United Kingdom	66,022,270	10.7	9	9.9	4,356
Sweden	10,067,740	14.2	4	11	5,600

Source: World Health Organization (WHO), 2017.

In the Brazilian case, the 1988 Constitution laid out the underlying principles of universality, comprehensiveness and equity of public healthcare provision, as well as the organizational principles of decentralization, regionalization, hierarchical and social participation of the country's Unified Health System - SUS (Sistema Único de Saúde). The implementation of these constitutional precepts was guaranteed by the enactment of the Organic Health Law (BRAZIL, 1990), which was based on the municipalization of public healthcare services under federal and state control, with the enhancement of the integrated management between the hierarchical levels of public healthcare service provision and fostering complementarity between the public and private healthcare services providers.

Territorialization of the public health care system was regarded the major problem in the first 10 years following the inception of the SUS, and Brazil's Ministry of Health, with the support of the Pan American Health Organization (PAHO), promoted "Territorial Workshops" with a view to finding practical solutions to tackle this problem. Through extensive debates involving the local communities and stakeholders, the SUS basic health units were able to delimit their operational areas and subsequently implement territorial planning measures which helped effectively tackle the problem related to the territorialization of the public healthcare system. Following the implementation of the territorial planning measures, the territory has become one of the main elements that constitute the spatial strategy involving the successful management of the SUS.

Firstly, the decentralization of the public health system was set in motion via the implementation of the national health policy and the adoption of public health management strategies which involved the municipalization of public healthcare services and the integration of preventive and curative activities under a single authority at each government administration level. The adoption of these strategic measures enabled the organization of a public healthcare network which operated based on territorial diagnoses of the people's living conditions and health situations.

Apart from the municipalization of the SUS, other effective spatial strategies which consider territorialization as a central political axis were also implemented; among these strategies included the delimitation of the public healthcare coverage areas in the basic health units and health districts, as well as the regionalization of public healthcare services. Interestingly, the adoption and implementation of these political guidelines and public health care management framework positively transformed the administration of public health policy in Brazil, where the constitution of the territory was defined as the central axis of the political struggle for the provision of good quality

public healthcare services and the efficient control of the health sector by the State.

Undoubtedly, massive technical advances have been made in terms of the production of information and the organization of statistical databases for the management of healthcare services over the thirty years of the existence of the SUS. These advances were only possible thanks to the establishment of well-defined spatial units of analysis and the expansion of primary healthcare services - the user's gateway into the public healthcare system and the first source of data processed in different databases kept by the SUS. Apart from the Mortality Information System (SIM - Sistema de Informação da Mortalidade) and the Live Birth Information System (SINASC - Sistema de Informação de Nascidos Vivos), the DATASUS, which is a data processing network administered by the SUS, has successfully been able to maintain a wide range of databases with reasonable quality and consistency, which are available free of charge for healthcare managers and health professionals, as well as for the general public.

Despite the huge progress made by the SUS in the management and provision of public healthcare services in Brazil, there are new challenges that need to be overcome. While it is evident that public health policymakers in Brazil have at their disposal a large amount of varied spatial data (from DATASUS) to support the territorial planning of state actions when it comes to the management and provision of public health care services, it is difficult to transform this huge volume of data into information relevant to the decision-making process in public health policy. Among the various difficulties encountered include the shortage of qualified professionals with technical expertise to analyze the reality of the Brazilian public healthcare system based on the spatial data from DATASUS, and the fact that the information systems themselves are flawed, since they fail to include other spatial dimensions into the data flow and the relationship between the data collected. In view of that, there is a clear difficulty in finding

parameters for the contextualization of the trove of spatial data compiled in the DATASUS system (BARCELLOS, 2008).

Fully aware of these problems, decision-makers in environmental health surveillance have been actively engaged in the development of strategic tools and comprehensive action mechanisms targeted at tackling these problems. Certainly, the improvement and dissemination of the new tools for health surveillance (BRAZIL, 2005), especially the Environmental Health Surveillance of Drinking Water Quality (VIGIÁGUA), the Health Surveillance of Populations Exposed to Contaminated Soils (VIGISOLO), and the Health Surveillance of Populations Exposed to Air Pollution (VIGIAR), open new perspectives for the cross-referencing of other information bases, in different formats (raster, vector) and from different public policy agencies, such as the Brazilian Institute of Geography and Statistics (IBGE) and the National Institute of Space Research (INPE), among others. It is plausible to say that, with the implementation of these strategic health surveillance tools, epidemiological studies will be much centered on the use of spatial units of analysis, thus becoming the main tool of territorial health planning in the country.

When this occurs, new challenges are bound to arise; among these challenges include the use of mapping and regional analyses which aggregate individuals according to pre-established spatial units and not only for conducting ecological studies. Even so, it will be technically possible to redesign information systems in order to incorporate multidimensional aspects of the concepts of region and place, which would enable the use of spatial information in longitudinal or cohort studies. Thus, we will no longer be talking about geography of territories as if they were lifeless and void of people.

In fact, very clear guidelines have been established under the SUS legal framework for the territorialization and regionalization of public healthcare system, and these guidelines have become the underlying premises for the organization of work processes and the provision

of public healthcare in the country. Clearly, while it is certainly one of the major underlying premises of the SUS management framework, territorialization should not be seen as a panacea for solving all the problems faced by the SUS, but rather as an approach toward underscoring the notion of public health as the production and reproduction of social life expressed in the social space. On the other hand, it must be borne in mind that the State cannot be considered the only force capable of intervening in the territory when it comes to the provision of public healthcare services for the population. It would be a huge mistake to think that the concept of territory is simply established based on its definition in official documents such as *The Operational Regulatory Standard for Health Care* (BRAZIL, 2002) or *The Pact for Health Care in Brazil* (BRAZIL, 2006). On the contrary, the territories delimited and defined under the public health policy framework are much more dynamic entities which are constantly disputed by political agents and stakeholders with divergent interests (GUIMARAES, 2005; 2008). The study of public health brings to light the social relations of competition and cooperation, delimiting the geographical scales around which the State authority is exercised and contested; this will be the object of analysis hereafter.

This article aims to analyze the regionalization of public health care provision in the State of Mato Grosso do Sul - Brazil, using small cities as a reference, since this geographical context, through its content and incipient urban functions, allows one to understand the different normative reasoning principles that regulate public health organization and health policy practices in the territory, and the importance of Primary Health Care.

Mato Grosso do Sul is composed of 79 municipalities, which are subdivided into 11 health micro-regions, which include the following: Aquidauana, Campo Grande, Corumbá, Coxim, Dourados, Jardim, Naviraí, Nova Andradina, Paranaíba, Ponta Porã and Três Lagoas.

The micro-regions are grouped under four health regions: Campo Grande, Dourados, Três Lagoas, and Corumbá.

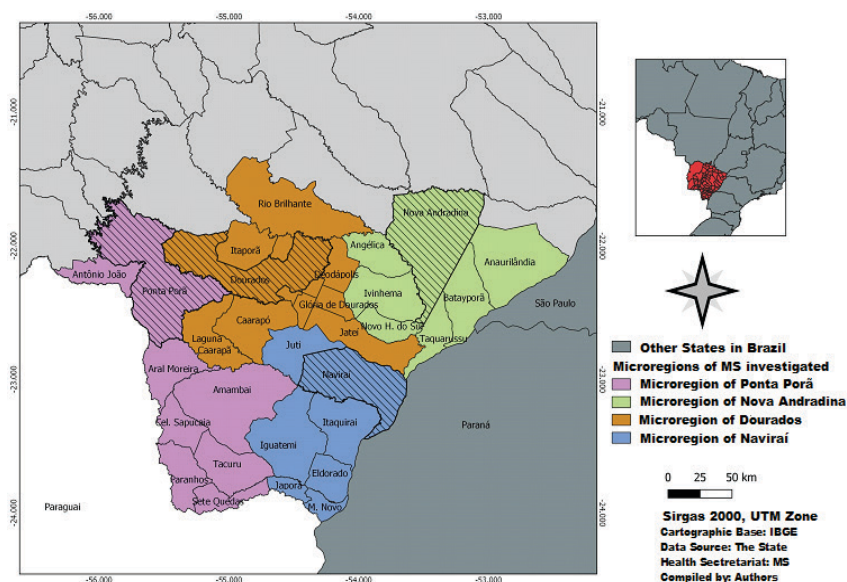
The Dourados macro-region comprises 33 municipalities, which are subdivided into 4 micro-regions (Dourados, Nova Andradina, Naviraí and Ponta Porã), as can be seen in Table 2 and in the map below.

Table 2 – Municipalities of the health micro-regions of Dourados.

Dourados Macro-region			
Dourados Micro-region	Nova Andradina Micro-region	Naviraí Micro-region	Ponta Porã Micro-region
Caarapó	Anaurilândia	Eldorado	Amambai
Deodápolis	Angélica	Iguatemi	Antônio João
Douradina	Batayporã	Itaquiraí	Aral Moreira
Dourados	Ivinhema	Japorã	Coronel Sapucaia
Fátima do Sul	Nova Andradina	Juti	Paranhos
Glória de Dourados	Novo Horizonte do Sul	Mundo Novo	Ponta Porã
Itaporã	Taquarussu	Naviraí	Sete Quedas
Jateí			Tacuru
Laguna Carapã			
Rio Brilhante			
Vicentina			

Source: State Health Plan (2015-2019) – compiled by the authors (2020).

Figure 1 – Map of the Macro-region of Dourados



The Health Plan of the State of Mato Grosso do Sul (2015-2019) states that the Pact for Health has established new guidelines for the process involving public healthcare planning and strengthening of the region, but it still does not ensure the universal provision of public healthcare.

The process involving the structuring of the network of cities shows that geographical space is derived from successive overlapping divisions of labor, and that, in each period, the network of cities reflects a different territorial and social division of labor, which needs to be considered in the health regionalization process. After all, it is not the contingent population that simply defines and structures urban spaces - even though it is a pertinent element thereof - but rather the urban functions that are developed therein and the social relationships that emerge from these functions.

This discussion helps one gain a meaningful understanding regarding the contents that shape the socio-spatial processes of small cities, which are inserted into the lower limit of urban complexity – referred

to as local cities by Santos (1982). These local cities are increasingly characterized by the relationship and mixture of rural and urban dynamics, society and nature, as well as political, economic and social dynamics; in this sense, the contents of these cities are required to be thought of as a hybrid system involving articulated and complementary relations in which mixtures and syntheses are produced over inherited territories. Even the new processes, such as the territorialization of globalized agribusiness, which modifies spaces in a conflictive and contradictory manner, can be found to maintain past structures. Thus, the contents that produce the spaces of the local cities must be understood as a hybrid system, such as local hybrid cities, as proposed by Roma (2012), which constitute a huge challenge when it comes to ensuring the universality and equity of national health policies in these areas.

For the analysis of the State of Mato Grosso do Sul, it is worth noting that there are different regional divisions. As can be observed in Table 1, under the master plan designed for the regionalization of health in Mato Grosso do Sul, the state is divided into 11 micro-regions along with the municipalities that comprise them. However, in order to delimit our empirical and analytical investigation (hybrid local cities), we will begin this study using the classification developed by REGIC (2018); this is because, on theoretical and methodological viewpoints, this classification correlates with urban functions in the network of cities.

The REGIC (2018) classification of the hierarchy of urban centers consists of the following: large national metropolis, national metropolis, metropolis, regional capital A, B and C, sub-regional centers A and B, and zone centers A and B. In a synthesis process, the REGIC classification is constituted by five levels of urban hierarchy: metropolis, regional capital, sub-regional center, zone center and local center.

Thus, when it comes to the overlapping of regional subdivisions (REGIC and the Regionalization Master Plan for Health), the analyses will be confined to hybrid local cities (ROMA, 2012), which are

the so-called local centers - according to REGIC (2018). In the case of Mato Grosso do Sul, the local centers are as follows: Angélica, Anaurilândia, Antônio João, Aral Moreira, Batayporã, Caarapo, Coronel Sapucaia, Deodapólis, Douradina, Fátima do Sul, Glória de Dourados, Itaporã, Ivinhema, Iguatemi, Jateí, Juti, Laguna Carapã, Maracaju, Novo Horizonte do Sul, Paranhos, Sete Quedas, Tacuru and Vicentina.

Considering the complexity of the laws involving the administration of the SUS in Brazil, a fundamental question springs to mind: how does the territory, in its power relationship, participate and is incorporated into the regionalization process? In the process of regionalization, can the territories be said to be socially produced and are they derived from incorporated historical processes? With regard to public health management and access to public healthcare services, how can the differences between agents (stakeholders) and territories express socio-spatial inequalities?

Regionalization as social content

The process involving the regionalization of healthcare services bears the principle of hierarchization - a context in which the dynamics of the network of cities is inserted, since urban functions shape the network of cities and the scope of the roles of each location is related to the population size. Thus, when analyzing the regionalization of health services, it is observed that regionalization bluntly ignores the social content of the territory.

The Health Plan of the State of Mato Grosso do Sul (The State Health Secretariat of Mato Grosso do Sul - Secretaria de Estado da Saúde de Mato Grosso do Sul (SES-MS), 2019, p. 56) states clearly that “regional strengthening – which is a structural issue in management, has not been fully achieved, once the regions, from the point of view of health, are required to be qualified in order to obtain comprehensive

healthcare ". In other words, the Health Plan considers the region as a priori data. In this sense, the public health policymakers in the region seek to make significant advances in the sector through the Regionalization Master Plan with health planning based on the organization of network services and the strengthening of regional governance.

In this debate, the contribution of geography - health geography to be precise, is to review the importance of considering the territory in its social content in the organization of the healthcare system. For Santos (1999, p. 19) "political science in general ignores the territory" and works with scalar and sectoral divisions, but it does not consider the social content - "the socio-territorial, socio-spatial dynamism which is a reflection of the forms-contents that have to do with existence"; the author adds that the territory "appears as statistics, which are little boxes that we open as we need to produce speech".

In Milton Santos' perspective, the space is formed by an "inseparable, solidary and contradictory set of objects and actions". According to the author, the geographical space should be treated analytically as a set of objects and action systems processed under the notion of a hybrid system - "the geographical space: a hybrid system", for which "form-content unites the process and the result, the function and the form, the past and the future, the object and the subject, the natural and the social" (SANTOS, 2006 [1996], p. 63 and 103).

In order to consider the social content of the territory as a necessary variable for Public Policy and for the territory to become a category of analysis within the social sciences with a view to producing projects – in other words, with a view toward politics with a "capital P", it must be taken as used territory (SANTOS, 1999, p. 18).

In this context, Santos considers the geographical space as synonymous to used territory; used as a "result of the historical process as the material and social basis of the new actions" (SANTOS, 2000, p.105), in a relationship characterized by production and reproduction of roughness, form-content and socio-spatial formation.

By inserting the word “used” as an adjective to territory, Milton Santos brings to the discussion elements that go beyond the strictly material. To deepen our theoretical and methodological understanding regarding the terminology “territory used” or “territory being used”, Maria Laura Silveira (2008, 2011, 2012) presented a reflective debate on the materiality and immateriality of politics, which constitute a hybrid phenomenon.

The term “used territory” encompasses all the players, all the aspects and all the existences in a given space; in this sense, the terminology is not confined to the dynamics of the State, as the conception inherited from modernity, though it does take it into account, once it is constituted by materiality and immateriality. The use of the terminology expresses a hybrid phenomenon which includes appearance-essence, form-content, reason-emotion, and so forth (SILVEIRA, 2011). According to Santos (2000), this can be explained by the fact that when the geographical space is taken as a synonym for used territory, this also implies the idea of a banal space because “a perspective of used territory leads to the idea of banal space, everyone’s space, all space”; in other words, the concept of used territory implies the “space of all men, all institutions, all companies and of all dimensions of what happens and all determinations of the social totality” (SANTOS, 2000, p. 104).

Silveira (2011) sees the concept of “used territory” as a matrix for social life. In this sense, to gain a thorough understanding of the concept, one must think about the interdependence and inseparability between materiality and action – i.e. between work and politics. Furthermore, according to the author, our common life cannot be solely confined to economic dynamics, as space contains culture (Silveira, 2011). Thus, the concept of “used territory” cannot be fully understood solely through economic and material dynamics, but also through political and cultural dynamics.

In view of all these elements that make up the content of used territory or territory being used by society, Santos (2006 [1996])

and Silveira (2011) emphasize that pure concepts are constituted by forms. According to Bruno Latour (1995), it is a mistake for modernity to work epistemologically with pure concepts. Under this line of thought, Santos (2006 [1996]) and Silveira (2011) consider the interrelationship between objects and actions, the human and the inhabited space as hybrid phenomena.

Haesbaert (2010 [2004], p. 79) also points out that an integrative reading of the social space should not be based on a one-dimensional reading and one needs to think of the territory as a hybrid concept: “hybrid between society and nature, between politics, economy and culture, and between materiality and ‘ideality’, in a complex time-space integration”. The author further states that:

Against the backdrop of this “hybrid” (and therefore multiple, never undifferentiated) notion of geographic space, territory can be conceived from the imbrication of multiple power relations, from the most material power of economic-political relations to the more symbolic power relations of a more strictly cultural order (HAESBAERT, 2010 [2004], p. 79).

Thus, the term “used territory” illustrates an integrative reading of social space, but also considers, in the process involving the use of the territory, the dialectic relation involving multiple territorialities, materiality and immateriality (form-content, reason-emotion, appearance/essence), as well as political and economic dynamics.

Also in line with Milton Santos’s concept of used territory, Monk-en and Barcellos (2005, p. 901) show that the category involving the territorialization of health is “used territory” and that the “used territory changes according to the dynamics of social relations”, in which everyday life emerges; the authors also point out that the work organization process and health practices reduce the concept of space in a purely administrative way.

Analyzing public health services from the perspective of a hybrid phenomenon, between systems of objects and systems of actions,

one notices that, in the system of objects (physical), hospitals and public services are set up and governed by a system of steered actions (norms) that structure the organization of the health system.

Currently, in a globalized world, relations, actions and objects are structured by an organizational process governed by rules. According to Santos (2006 [1996], p. 228), on the one hand, there are “objects susceptible to participate in this order, and on the other hand, there are rules of actions in the organizational process, in which orders are created for specific purposes.

Actions are governed by rules and:

“an action assumes the existence of one or more agents imbued with purpose, and the agent can be an individual or a group of individuals grouped in the form of a company, institution, social movement or any other configuration that presents an internal labor division to, through logical and rational organization, make a specific inference about the reality” (MENDES ANTAS Jr., 2004, p. 82).

According to Mendes Antas Jr. (2004), reality shows that the rules are based on the routinization of events that must be conditioned by a social origin and that in countries which are governed purely based on Western law, legal monism prevails; in other words, the State is the legitimate producer of legal norms. The author also points out that the regulation of the national territory occurs on account of “on the one hand, the monolithic and extensive power of the sovereign hegemony, on the other hand, the economic sectors” (MENDES ANTAS Jr., 2004, p. 85).

If we understand the actions/norms through a system of objects and actions (form-content), we can learn that “actions are increasingly alien to the purpose of man and place” (SANTOS, 2006 [1996], p. 80). Under the same line of thought, Guimarães (2015, p. 02) shows that “they standardize the system’s action in the country through norms, ordinances and decrees, leaving the complex singularities of

each place in the background and, therefore, the complex demands for health”.

In this inseparable and contradictory framework, the rules may not reflect the relationship between the different social agents/ subjects that produce/reproduce and experience the socio-spatial reality - the used territory. From the perspective of a State that is the legitimate producer of standards, the size of the used territory is not taken into consideration, and, thus, the needs of the population that produces and uses the territory as a shelter and means of survival are disregarded, to the detriment of the agents that are in dispute of the territory politically and corporately.

If the concept of space is political and is constituted by power relations, legal norms related to health can be said to be created intentionally with the aim of maintaining the power structure centered in the State, disregarding the multiple power relations that take place in the used territory.

Power is involved in the actions and norms produced intentionally, as well as in every social relationship; this is because power is essentially a substantial factor in every relationship, once it is “neither a spatial category nor a temporal category, but it is present in all the production that is supported by space and time” (RAFFESTIN, 1980, p. 6).

The power of the State, in this case, is expressed through the rules which can, through regionalization, ensure equal opportunities for all citizens or further deepen the process of socio-spatial inequality.

The regionalization of health, in which services are hierarchized as a norm, presents a scale that is determined by the State. In this sense, “it is a one-dimensional geography, which is not acceptable as there are multiple powers that are manifested in regional or local strategies” (RAFFESTIN, 1980, p. 17). Considering that conflicts and disputes in this process reflect power relations and political power relations are part and parcel of every society, the multidimensional

nature of the “experienced territory” - the territoriality, is factually evident (RAFFESTIN, 1980).

This one-dimensional geography of the State favors what is conceived and standardized to the detriment of what is experienced and perceived. Thus, it fails to take into account the contradictions and complementarities of the power relations that are established in the structuring of space and in the processes of territorialization, which, through the multiple powers - multidimensionality, articulate what is conceived and experienced (RAFFESTIN, 1980).

Even if the State succeeds in implementing this one-dimensional geographic power system, the political fact created will ultimately become evident to the whole society, thereby engendering conflicts and opposition. Interestingly, it is in the sphere of conflict and opposition that power relations are strengthened; and even though the power relations are asymmetrical, they are still present and real. The unidimensional scale reflects the norms that have the potential to dissolve the social fabric produced through the social relations of the political subjects involved. In this sense, one needs to think of regionalization as a social content of the territories.

Since power is relational, it is the territorialization process that ultimately leads to the delimitation of the territory through use and possession and, not only, through determinations and norms, because territoriality is an inclusive process which does not separate those inside from those outside. For this reason, territoriality is unlikely to coincide with the demarcated limits - the “experienced” spaces of territoriality (RAFFESTIN, 2005).

With regard to multidimensionality, Raffestin (1980) points out the existence of multiple powers, since power relations are structured throughout the society of the “experienced territory”, which is characterized by a conflictive and opposition process. The concept of used territory - coined by Milton Santos, which is synonymous to geographical space, is based mainly on the space of all kinds of

relationships (people, companies, institutions) in a hybrid system; in other words, used territory is produced and reproduced through the various power relations existent in a given space. In this sense, when one considers the multiple scales involved in the discussion about used territory, the concept of territoriality should be treated in a multidimensional way as pointed out by Raffestin (1980).

When public health policies are shaped solely by the uniscalar attribute of the State, the multidimensional characteristics of the different and varied territorialities are clearly disregarded. By enforcing selectivity and delimiting the access to public healthcare services, the health policy produces socio-spatial inequalities. Thus, when it comes to the regionalization of health, the norms must be produced and guided by the social relations involving the political agents/subjects at stake; in other words, one needs to consider the existence of multiple territorialities when it comes to the constitution of norms.

In the current context of regionalization of health services, territorialization of health services implies the process of creating service areas. According to Faria (2012, p. 4),

these are (service) areas because they are geometrically defined based on the number of inhabitants previously determined and standardized for the whole country. However, such areas contain limits, impose barriers and are also expressed through power relations.

Faria (2012, p. 4) shows that this power relationship is expressed in a one-way fashion; that is, it is only produced by the State in a unidimensional way.

A thorough analysis of the diverse norms related to public healthcare shows that the management of medium and high complexity services is attributed to the States and the Federal District; this hierarchizes the health system and favors some municipalities to the detriment of others. In this context, the State presents itself as a ruling entity and a key player in the power relations involving

the regionalization of health. Despite the existence of bipartite and tripartite chambers under the public healthcare management system, it is the State that manages and determines the location and distribution of medium and high complexity services.

According to the Health Plan of the State of Mato Grosso do Sul (2015-2019), specialized care consists of high cost services intended for people with more complex health problems which require greater specialization and use of highly advanced technological resources. Surprisingly though, the Health Plan states that “the services of greater complexity have been installed in the most populous municipalities in the State of Mato Grosso do Sul, mainly because they can count on more specialized professionals” (SES-MS, 2019, p. 69).

Below, Bernardelli and Matushima (2009) analyzed the effects of the concentration of health services in the main urban centers of the State:

The resources were concentrated especially in the larger cities, such as the capital (Campo Grande) and Dourados, the second largest city in the state. Especially in the case of Prodegran (Greater Dourados Region Development Program), such policy was emblematic for the redefinition of the roles of municipalities in the region, as this policy, based on the idea of “development poles”, further weakened the roles of small towns, causing the loss of their competitiveness due to its intensification of polarization (BERNARDELLI and MATUSHIMA, 2009, p.6).

The complex territorial division of labor clearly points to the existence of urban centers with different forms and functions. The implementation of territorial division of labor and the agglomeration dynamics in the rational organization of health services are part of the strategy devised in an attempt to effectively manage the scarce resources in the public health sector. Clearly, while such strategic measures are needed, this systemic organizational rationality cannot

deepen the material and political poverty that exists in the content of hybrid local cities (ROMA, 2012).

According to Santos (1999, p. 16), taking into account that “a form which, because it has a content, structures society in a particular way - which is due to the form”, in the process of healthcare services organization, the form-content of these locations should be considered in order to effectively ensure access to health services for the population. Furthermore, public policies should be designed based on a solidary operational mechanism.

In this perspective, regionalization of health helps to ensure the integration of healthcare for uniqueness purposes (SES-MS, 2019). Thus, having a thorough discussion on the form/content of Primary Health Care in scalar articulation with the other levels of care is extremely important for the process of health regionalization; this discussion is especially relevant when it comes to the analysis of the socio-spatial reality of access to health services in small cities.

Primary health care and scalar articulation in the health regionalization process

In terms of the interrelationship surrounding the social, economic, political and cultural dynamics of a given society, primary health care can be defined as the level of care associated with the general health conditions of the population. By this definition, one can say that primary healthcare services are directly correlated with living conditions (FARIA, 2012).

Based on this line of thought, primary care is seen as extremely complex and fundamental for the successful articulation and organization of the health system; in other words, “as a service organization strategy, primary healthcare gains expression, configuring itself not only as a level, but as a privileged place for healthcare in its completeness” (FARIA, 2012, p. 43).

Given the relevance of primary healthcare, it is not for nothing that the World Health Report (WHO, 2008) is entitled “Primary healthcare: Now more than ever”. The report states emphatically that primary care structures are equitable, inclusive and fair health systems which provide a holistic approach to health, beyond fragmented and fragmenting care.

As discussed above, the actions/norms that define and structure the organization of the health system have become increasingly detached from the conceptual ideals for which it was created with the objective of catering to the health needs of man and the place in which it is required to serve. Thus, it is essentially important to think of the territorialization of health through the use of the territory where the dynamics of social relations takes place. The World Health Report (WHO, 2008) highlights the importance of recognizing the human dimension in health; it also points out that adapting the response of health services to the specificities of each community represents the greatest challenge in the provision of healthcare, as this can lead to a worsening of inequities.

Faria (2012) points out that:

In addition to its role as a gateway and the user's first contact with SUS, primary care should play a strategic role of coordination in relation to the other levels of care, since patients are required to (or should) pass through primary care, are forwarded (from there) and return to it (FARIA, 2012, p. 02).

The Primary Health Care is the user's gateway to the national health system (SUS). This level of management of health services plays an important role by coordinating the other levels of healthcare, providing guidance and direction regarding the actions to be taken (FARIA, 2012).

In this sense, one does not need to overemphasize the importance of primary healthcare when it comes to the scalar articulation of health regionalization, especially with regard to small cities.

Table 3 – Primary Care Structure

Cities	Community health agents		Family health teams		Oral health teams		Family Health Support Centers		
	Imple- ment- ed	Proportion of estimated population coverage	Imple- ment- ed	Proportion of estimated population coverage	OHT mod 1	OHT mod 2	FHSC 1	FHSC 2	FHSC 3
Angélica	17	100	4	100	2	2	0	1	0
Anaurilândia	16	100	3	100	2	0	0	2	0
Antônio João	15	100	3	100	3	0	0	1	0
Aral Moreira	19	100	4	100	3	0	0	1	0
Caarapó	46	99.69	5	65.02	4	0	0	0	0
Coronel Sapucaia	23	92.78	3	72.61	3	0	0	1	0
Deodápolis	31	100	6	100	2	2	0	1	0
Douradina	10	100	2	100	0	0	0	0	1
Fátima do Sul	43	100	6	100	5	0	1	0	0
Glória de Dourados	20	100	4	100	4	0	0	0	0
Itaporã	51	100	8	100	5	0	1	0	0
Ivinhema	43	100	6	92.22	7	0	1	0	0
Iguatemi	32	100	4	91.06	4	0	0	1	0
Itaquiraí	43	100	6	100	6	0	0	1	0
Jateí	10	100	2	100	2	0	0	0	0
Juti	11	100	2	100	2	0	0	0	0
Laguna Carapã	14	100	3	100	2	0	0	0	0
Maracaju	46	67.66	11	97.07	11	0	1	0	0
Novo Horizonte do Sul	14	100	2	100	2	0	0	0	1
Paranhos	26	100	3	81.67	3	0	0	0	0
Sete Quedas	24	100	3	96.22	3	0	0	0	0

Cities	Community health agents		Family health teams		Oral health teams		Family Health Support Centers		
	Implemented	Proportion of estimated population coverage	Implemented	Proportion of estimated population coverage	OHT mod 1	OHT mod 2	FHSC 1	FHSC 2	FHSC 3
Tacuru	23	100	3	99.12	2	0	0	0	1
Vicentina	14	100	2	100	2	0	0	0	1
Dourados	249	71.33	42	72.19	41	1	3	0	0

Source: SES-MS (2019) ; compiled by authors (2020).

With regard to health agents, the estimated population coverage ratio in the local hybrid cities can be considered satisfactorily good, with the exception of Maracaju which has an estimated coverage ratio of 67.66%. In contrast, the estimated coverage ratio in Dourados is 71.33%. In the case of the coverage of family health teams, the coverage ratio can be found to decrease; some locations have an estimated coverage ratio of 100%, while others have estimated ratios of 65.02% and 72.19%. A quantitative comparative analysis of health agents and family health teams showed that there is a worse distribution of health agents and family health teams in the medium-sized city of Dourados.

The family health support centers (FHSP 1, 2 and 3) are structured based on the number of family teams deployed in the territory and differ in terms of the number of professionals and workload (i.e. professionals that make up the healthcare facility). The cities of Deodópolis, Itaporã, Ivinhema, Rio Brilhante and Itaquiraí statistically require and support the implementation of FHSC 1, though they have FHSC 2.

The cities of Caarapó, Glória de Dourados, Jateí, Juti, Laguna Carapã, Paranhos and Sete Quedas have no FHSCs; this situation points to the poor state of Primary Care in these locations, especially, when FHSC serves to

increase the resolution and quality of Primary Care, expanding the repertoire of Primary Care actions, the care capacity of each professional and the population's access to more comprehensive offers that are closer to their needs.

The FHSC must include a team in which professionals from different areas of knowledge work together with those of the FHT, sharing and supporting health practices in the territories under the responsibility of the teams. Such composition must be defined by the municipal and FHT managers themselves, using priority criteria identified based on local needs and the availability of professionals from each of the different occupations. (BRASIL, 2013).

Table 4 – Healthcare facility of the macro-region of Dourados – 2020.

Municipality	Estimated population 2020	BHU	Estimated population served by BHU	Family health team	Estimated population served by family team	Hospital with SUS care	Beds per 1000 /h
Angélica	10.932	1	10.932	4	2.733	1 philanthr.	2.41
Anaurilândia	9.076	2	4.538	3	3.025	1 philanth.	1.32
Antônio João	9.020	2	4.510	3	3.006	1 public	0.78
Aral Moreira	12.332	7	1.762	4	3.083	1 public	0.98
Batayporã	11.349	3	3.783	5	2.269	1 philanth.	1.60
Caarapó	30.593	5	6.119	5	6.119	1 philanth.	2.29
Coronel Sapucaia	15.352	2	7.676	3	5.117	1 public	0.59
Deodápolis	12.984	3	4.328	6	2.164	1 public	2.47
Douradina	5.975	4	1.494	2	2.987	--	0
Fátima do Sul	19.170	2	9.585	6	3.195	1 philanth.	5.10
Glória de Dourados	9.950	3	3.317	4	2.487	1 philanth.	1.20
Itaporã	25.162	2	12.581	8	3.154	1 public	0.60
Ivinhema	23.232	1	23.232	6	3.872	1 public 1 private	2.19
Iguatemi	16.176	2	8.088	4	4.044	1 private	2.05

Municipality	Estimated population 2020	BHU	Estimated population served by BHU	Family health team	Estimated population served by family team	Hospital with SUS care	Beds per 1000 /h
Itaquiraí	21.376	1	21.376	6	3.563	1 philanth.	1.32
Jateí	4.021	3	1.340	2	2.010	1 philanth.	5.20
Juti	6.787	2	3.393	2	3.393	1 public	1.34
Laguna Carapã	7.419	3	2.473	2	3.709	1 public	0.95
Maracaju	48.022	14	3.430	11	4.366	1 philanth.	1.10
Novo H. do Sul	3.684	1	3.684	2	1.842	1 philanth.	3.93
Paranhos	14.404	7	2.486	3	4.801	1 public	0.70
Sete Quedas	10.771	2	5.385	3	3.590	1 public	5.93
Tacuru	11.664	2	5.832	3	3.888	1 public	0.69
Vicentina	6.109	2	3.054	2	3.054	1 public	0.81
Dourados	225.495	37	6.094	42	5.369	2 publics 1 philanth. 1 foundation *	3.35

Source: IBGE (2020); accessed on 28/09/2020: <https://www.infosaude.com.br/cities/459>

State Health Plan (2016-2019). Compiled by authors (2020).

The National Primary Care Policy (PNAB, 2017) recommends a population of approximately 2,000 to 3,500 people per Primary Care Team (PCT) and Family Health Team (FHT). Based on this recommendation, with regard to FHT, out of the 24 cities investigated, 14 cities meet the recommendation. The cities of Caarapó, Coronel Sapucaia, Paranhos and Dourados have 6,119, 5,117 and 4,801 and 5,369 people per FHT, respectively; these are clearly above the recommended values.

When one considers this recommendation for BHUs - an important element in the analysis of small cities, only 9 cities have a population between 2,000 to 3,500 people; the cities of Aral Moreira (1,762),

Douradina (1494) and Jateí (1340) stand out positively because they have very small populations. In contrast, the BHUs in the cities of Angélica (10,932), Caarapó (6,119), Coronel Sapucaia (7,676), Fátima de Sul (9,595), Itaporã (12,581), Ivinhema (23,232), Iguatemi (8,088) and Itaquiraí (21,376) serve the following populations, respectively: 10,932, 6,119, 7,676, 9,595, 12,581, 23,232, 8,088, and 21,376. These populations are superior to the values recommended. Similarly, the BHU in Dourados serves a total population of 6,094 people.

With regard to the availability of hospitals and beds per inhabitants, it is noteworthy that the hospitals in the local hybrid cities analyzed have less complex structure which provides services of low complexity and relatively fewer beds per 1000 \ inhabitants. Under this category, the cities of Fátima do Sul (5.10), Jateí (5.20), Novo Horizonte do Sul (3.95), Sete Quedas (5.93) and Dourados (3.35) stand out positively, since they have 5.10, 5.20, 3.95, 5.93, and 3.35 beds per 1000/inhabitants, respectively.

In general, based on the quantitative data compiled, the FHT – the main element that reflects the proper functioning of Primary Care, was found to provide a good number of services (estimated) in the local hybrid cities. The results obtained from a comparative analysis showed that most of the cities investigated had a coverage ratio better than that of the city of Dourados. When one analyzes the enrolled population served by the FHT, one will observe a rise in the recommended population number for the cities investigated – this phenomenon is also observed in Dourados.

A thorough analysis of the quantity and structure of BHUs showed a decline in the effectiveness of Primary Care in local hybrid cities. As can be seen in Table 2, in different locations, the population assigned to the BHU is high and the facilities (equipment and services) are either rudimentary or far below what is expected; this situation reflects the findings reported by Bousquat et al. (2017) who showed that only 4.8% out of the 38,812 Basic Health Units (BHUs)

they analyzed in Brazil presented the adequate facilities based on the standards established.

In addition, based on the SUS hierarchical organization model, medium and high complexity services – which are expensive and require highly advanced technology, have historically been installed in the most populous municipalities. The SES-MS (2019) points to the need for decentralization of specialized services. This is a big challenge because fewer specialists want to work in the countryside; apart from that, decentralization of this kind of services involves high costs and huge investment in new technologies.

The lack of decentralization of specialized services leads to situations in which residents from local hybrid cities need to travel frequently to access these services in urban areas and some patients end up dying on the way. For instance, a person who has had a heart attack and lives near a hospital may have access to emergency resources (catheterization, for example); this person is highly likely to die if he/she needs to travel far away to have access to these specialized services. Clearly, it is not feasible to operate highly complex services in each location, and this effectively calls for better integration of the health system and a reasonable degree of decentralization.

Living in local hybrid cities puts citizens at a disadvantage from the point of view of access to technological resources - which are made available in a very selective manner. In other words, there is still lack of integration between Primary Care carried out in the municipality and specialized care provided in larger cities. The implementation of an effective process of regionalization is the only way to improve the conditions of access and life of the population, as highlighted in the SES-MS (2019, p. 65): “implementing regionalization to decentralize health actions and services and strengthen the agreement (relation) between agents”.

Although access to public health services is regarded a universal right of all Brazilian citizens according to the 1988 Constitution, the

technical norms that regulate the organization and management of the national health system are established politically (SANTOS, 2006 [1996]). In the quest for improving the organization of public healthcare services through the application of strategic techniques and management, the regionalization of healthcare inadvertently enhances the selective character of healthcare provision. In Brazil, one will observe that great barriers are imposed on the vast majority of the population when it comes to having access to medium and high complexity health services.

The discussion on access to health services is of fundamental importance in any study on the population's living conditions, since the barriers or difficulties encountered in meeting health needs can affect the quality of life and even jeopardize the individual's survival (GUIMARÃES; AMARAL; SIMÕES, 2006, p. 17)

In this line of thought, Faria (2012, p. 47) points out that the great problem related to healthcare is currently associated with access, as it is one of the main generators of inequality; according to the author, "the more specialized the attention, the more selective the access becomes and the more unequal its use". It is worth noting that although the population has access to public healthcare resources, since they can be referred to larger health centers, the fragmentation and displacement factor puts the vast majority of the population at a disadvantage with regard to access to highly advanced technological resources in the health system.

Furthermore, the public policies implemented in the current health regionalization process fail to account for the use value of the territory when it comes to the qualification/determination of health regions. Thus, the geographical locality imposes a differential status of power, representing dissymmetry, as pointed out by Dantas and Aranha (2009): "in addition to individuals, the territory and place are revealing of the geographies of inequality" (DANTAS and ARANHA, 2009, p. 130).

Valuing the use of territory is based on the principle of considering differences between groups and places, but differences should not enhance and/or deepen inequalities. As pointed out by Castro (2009), Brazil is marked by disparities that are also present in the differentiation in relation to the availability of services, as well as the characteristics of the political spaces that meet the conditions for the exercise of citizenship (CASTRO, 2009, p. 206). According to the author:

This relationship between the formal existence of a right and the possibilities of exercising it in a specific territory proposes to geography to reflect on the mediation of space that is imposed on the concept of citizenship, since even under the legal bases of isonomy on a national scale, the law is not capable, on its own, of guaranteeing equal access to rights on the scale of citizens' daily lives. It is then up to political geography to inquire how the territory expresses the concrete exercise of citizenship and, in Brazil, whether it is possible to speak of a territorially unequal citizenship and how to indicate the roots of such inequality.

Bearing in mind the need for strengthening Primary Care in hybrid local cities and the implementation of effective solutions to tackle the problems related to the fragmentation of healthcare and lack of equitable access to health services caused by territorial displacement, one can say that the vast majority of the Brazilian population who live in impoverished locations experience a territorially unequal citizenship. These people experience a socio-spatial inequality with roots in the politics of centralization of technical rules, which are intrinsically political; clearly, the current conjuncture (2020), which has deepened this inequality, points to a total dismantling of the Unified Health System itself.

The SES-MS (2019, p. 56) states that the health pact has contributed toward regional strengthening and advancement, yet it "has not fully achieved the objective, since regions, from the perspective of health, need to be qualified, to guarantee the full access to healthcare". Thus, health regions need to be defined in terms of management as a social

production of the subjects/agents who work, live and become ill in a dynamics in which interrelationship must overcome fragmentation.

Based on the considerations on health regionalization presented above, one can say that regionalization still represents another hierarchical event which operates at the expense of a complementary event. A hierarchical situation, on the one hand, represents verticalization and hierarchization as a norm, whereas a complementary situation, on the other hand, reflects interurban relations in a horizontal way – in other words, articulation between territories based on zonal or networking logic (SANTOS, 2006 [1996]).

Thus, the territorial division of work in the public healthcare services reflects a hierarchical norm and an unequal access to technological resources, and this expresses a “hierarchical phenomenon/happening”; indeed, although the hierarchical phenomenon/happening is superimposed on the complementary phenomenon/happening of multiple scale, the term “used territory” is a “search for coherence, solidarity between happenings” (SANTOS, 1999, p. 23).

In this health system network, verticalization represents the territorialization of high and medium complexity services and horizontalization represents the Primary Care network. Horizontalization and verticalization, along with their fluid and fixed patterns, do need to complement each other. Clearly, even if the Pact for Health helps in the advancement of regionalization and decentralization of the SUS and in the enhancement of complementarity between the regions, it is still the complement that is the “knot to be untied”.

Final Considerations

The findings of the present study show that that the organization of health services is still based on a territory defined by norms and the institutionalization of that power (State) does not take into account the power of the territory used. Thus, the successful integration of

the health system effectively depends on participatory management through planning, which starts from multiple territorialities - in other words, the subjects and the agents that produce the territory.

The continued pursuit of this territory-defined-by-norm model of health organization leads to the worsening of the lives of individuals who dwell in certain territories that are less endowed with physical, technical and human resources; thus, these individuals find themselves inserted in multiple processes of socio-spatial inequalities.

Public health policies must seek to enforce the principles of universality, equality and integrity and active participation in which the right to equity in the management and access to health is ensured and where the territory of hybrid local cities, for example, is allowed to effectively promote the exercise of citizenship.

The health regionalization process must be designed based on an articulated and complementary relationship under the multi-power relationship framework. In this process, one needs to consider, above all, the content of the territory used and, as Milton Santos pointed out, the territory used should reflect the possibility of building from the bottom up. Thus, investing in the articulation and coordination of the levels of public health services to remedy the problem related to the fragmentation of access to public health system can help overcome this far-reaching, disparity-boosting hierarchical phenomenon and reduce the deeply entrenched systemic inequalities.

Finally, it is noteworthy that in hybrid local cities there are two faces of poverty: the material face - which is mainly related to unemployment and poor remuneration, and the political face - which is linked to assistance and political favoritism; these two faces reinforce each other and constitute structural elements of exclusionary poverty, which is "structural and globalized" (SANTOS, 2000 [2004]). And it is, mainly, in this context, that we need a "complementary event" (SANTOS, 1996), which is targeted at the implementation of a cooperative and solidary regionalization of

public health services through the administrative structures of the SUS in the State of Mato Grosso do Sul.

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GEOGRAPHY AND ENVIRONMENT: STATE POLICIES IN THE CONFIGURATION OF SUSTAINABILITIES IN BRAZIL

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Introduction

Mentioning the early days of institutional discussions on Ecology and Environment in Brazil means resuming the developmental rationale of military government projects between the years of 1965 and 1985. The first approaches on the topics concerning the regulation of Nature and its spatial relation by the public authority contain strong geopolitical burden associated with the power of the State on national territory resources, as identified by Bertha Becker in her vast collection on the Brazilian Amazon, since the 1980's. Brazil's public management of these topics up until that decade met powerful resonance in decisions and interests of the military influenced by a conservative nationalism that advocated the protection of the country's borders – notably in regional spaces further north and west; portions of the national territory with little consolidation of state projects for agricultural frontier expansion and transport and energy infrastructure. Therefore, the public management of the Brazilian environment began with a bureaucratic geopolitical strategy based on national development *a priori* originated

from internal control of resources; largely associated with the pattern for economic growth of the time.

As of 1970, discussions on ecology and environment have occupied the international scenario at forums, conferences, disseminated ideas, and perspectives, which, in turn, gradually modified how ecological and environmental topics reached territorial management strategies and how public policies were able to include them in their modernization and institutional projects. In that sense, ecological and environmental public policy decentralization occurred throughout the country, mostly in the north and the Midwest, once those portions received special attention from the State for their maintenance, in public administration terms, of the national strategic vision *Amazonia Legal*. With the gradual return of a decentralized federation management in Brazil, the management of the rights of the states together with multiple political parties brought by the direct elections for state governments created momentum for the discussion of ecological and environmental agendas, reinforcing the management of such matters by other levels of political and institutional representation.

With the enactment of the municipal constitution of 1988, the restoration of the public and bureaucratic engine by the Brazilian states was reinforced with the amplification of power of local governments (municipalities). The fact was consolidated by Magrini's study (2001) under an 'integrative standpoint' (a 1990's characteristic) and environmentalism, the basis for the institutional theoretical line for the creation of current political actions on ecological and environmental discussions in the country. For that matter, Union, states and municipalities began a joint action in ecological and environmental projects in their territories under hierarchic authority (WRIGHT; 1988 – see page 12, tables 3 and 4) based on municipalities representations. They remain as the third power in final decisions on strategies about uses and appropriations of natural resources, as follows.

According to Magrini (2001), the environmental policy Evolution in Brazil may be described through world milestones happening after the second half of the 20th century. They influenced the course of our ecological and environmental policies. In that sense, before being integrative (desirable these days), environmental issues, according to the same author, had 'correctional' (mainly at the end of the 1960's and throughout the 1970's) and 'preventive' standpoints (mainly in the 1980's).

Under this integrative standpoint, Théry (2005) reinforces the idea that the revival of the Brazilian State of Law takes the discussion and appropriation of Amazonia Legal to a new level of importance: the national level. According to the same author, Fernando Henrique Cardoso's governments, through federal programs 'Brasil em Ação' (1996) and 'Avança Brasil' (2000), promoted economic and structural integration projects in Amazonia nationally and continentally strengthening the region which has become a milestone for the connectedness of Brazilian productive and structural networks in South America. The productive chains in Amazonia became the focal point for Brazil's continental integration and the strong technological and structural apparatus brought to the region compelled Brazilian and international societies to promote forums to establish public policies, which could prevent the serious ecological and environmental problems that arose in Amazonia. The social and environmental transformations had a multiplying effect in the way the State and the Brazilian society viewed ecological and environmental issues. After RIO-92 Summit (among many others, which took place throughout the last decade of the 20th century) in Rio de Janeiro, such topics were definitively incorporated in the National Public Power, in several levels.

After the workers' party governments (2003), the country has been facing a decade of strong decentralization of national environment management projects (despite the identifiable contradictions in

the legislation, which remains highly concentrated and hierarchic). This fact highlights the contribution of geography to the understanding of what we call 'sustainability' within the Brazilian territory as a reflection of the political space. How do we promote sustainability in a scenario of multiple territories presented in such an ecologically diverse and controversial country? What is the State's understanding of the ecological and environmental management and how can it be structured to promote social justice from the standpoint of cooperatives among the federative units? In that sense, this article provokes readers and researchers to think and apply management tools, which may multiply ways to use ecological and environmental assets, primarily conceived to reduce inequalities in Brazilian society, for collective benefits. It is also about structuring the dynamics of public management in a geographically diversified environment what may contribute to the understanding of how geography can think territorial policies in Brazil and in the world.

Eco-environmental policies in Brazil: general aspects of a late federative problematization

Eco-environmental policies in the country were developed late when compared to the other sector-based policies and have emerged, basically, in response to the international environmental movement demands since the German 'Gruner' (greens) in the mid-1960's (LEIS, 2004). Such delay is directly related to little academic culture during that period in the country, once the conservative urban-industrial elite believed in the classic model for the 'nations' wealth owed to rostowian or marxian logics.

As ancillary to development, or 'necessary evil', pollution and environmental degradation increasingly affected the country's population becoming even worse with the *metropolitanization* in the outskirts of the planet. Problems concerning the distribution and conservation of

urban bodies of water, preservation of springs, green slopes and air in the cities... and all sort of change in natural aspects so as to maintain the ecological order in the cities extended the discussion about the State's ability to mitigate the impacts generated by development. For that matter, the great urban centers became observation fields for researchers in synch with the environmental issues of Brazilian cities, once the pollution and the environmental impact of disorderly growth, although visible, were justifiable due to 'the benefits brought by progress'; in other words: eco-environmental issues were to be accepted with resignation. (GOLDEMBERG, 2004).

However, times were changing. Considering the power of the USA's public authority - the first country to notice the need and urgency of public authority intervention in eco-environmental issues in the 1960's, with definition, at the Federal level, of the Environmental Impact Assessment (AIA), formalized in 1969 (GOLDEMBERG, 2004) - it was in the former Cold War's West Germany that the expression of the environmental policy representation was able to develop, in the following decades, a culture for environmental education (GRUN, 2007) which was able to form several individuals, acting in the legislation arena, with appropriate agendas to serve the German and European society.

In Brazil's case, despite eco-environmental policies having been born during military governments in the 1970's, such birth occurred due to international pressure concerning Amazonia and its preservation. Even being considered the greatest environmental summit in the contemporary world - one that was able to structure future institutional summits that resulted in the greatest eco-environmental issue of the current world, Stockholm Conference (1972) was conceived in Brazil as a geopolitical strategy of the Cold War. It was a western takeover of environmental causes, much more than a 'necessary evil' than development, something that could bring about the end of development itself. Such discussion was aborted in the country for two reasons:

1) discussions on national sovereignty over areas with better natural resources (Amazônia Legal) and continental borders and 2) the perspective that nature had to promote the great country of the future, a nation yet to be industrialized, keep the high agricultural production and the huge mineral and drinkable water reserves. As the powerful nation of the future, Brazil would be responsible for the maintenance of the global system of power relations around resources for development.

In spite of all that importance, specific environmental policies (similar to the ones in several countries such as West Germany) were not devised by Brazilian public authorities who dealt with the environment and its related topics through sectors in accordance with the following codes: water (1934), forest (1965) and fishing and hunting (1967) (BREADARIOL, 2001). There was no coordinated government action or any entity managing the issue in the central scope (note that the periods mentioned by the author are related to dictatorship in the country - Vargas and military government's post 1964) or any other scope in the federation.

Nevertheless, throughout the modernization of the outskirts (Brazil included), pollution has earned focus in some social and economic sectors (industrial activities, water pollution, urban mobility...) which will, in turn, generate environmental demands (MEADOWS, 1972). In spite of very few regulations and interventions, the State could no longer avoid changes in legislation regarding water and air pollution.

Having been extensively studied, development projects post-1970 adapted the 'Growth Boundaries' report formulated by MIT which presented models relating economic and demographic growth variables to pollution and natural resources depletion, highlighting technical aspects of the contamination - due to the world's rapid industrialization and urbanization. (MEADOWS, 1972). The objective of the document was obtaining a broader view of the limits and qualitative and quantitative restrictions regarding the population growth

and the amplification of its activities (production, consumption, and disposal), identifying the elements that influenced the behavior of world's systems and their interactions. The academic, managing 'intelligentsia' mentioned a 'certain world crisis'.

At that point, political concerns regarding eco-environmental management started and the conferences on topics related to global ecology, mostly by the UN, encouraged societies to seek governmental actions that could provide technical and financial assistance to avoid/contain growing environmental damages. Several national entities were charged with planning, managing and controlling environmental resources in the territories. Nevertheless, the dictatorial period of that time and the military, geopolitical project of turning the country into the great 'power of the future' reinforced the idea that the economic growth should not be sacrificed for a purer environment. That perspective was defended by Brazil's Central Government in international summits such as the Stockholm Conference (1972) (FERREIRA, 1998).

Actually, Brazil's international participation intended to redirect national responsibilities for the environmental burden of economic growth for central nations, once their managers leaned on the principle of sovereignty (in other words: natural resources within the national territory belong to Brazilians) in order to prevent the country's submission to decisions concerning eco-environmental protection made internationally by countries and agencies.

With the creation of the National Bureau of Environment (SEMA, in Portuguese) in 1973, public authority actions concerning eco-environmental issues generated by economic growth started being 'thought of internally' by political agents still centralized in the state of exception during the military dictatorship. Despite all that, there were considerable advances in the legislation on the observation and control of production of biodegradable detergents, car pollution, delimitation of critical areas of pollution and the creation of national

conservation units. In fact, measures taken at that time concentrated on accusations about industrial and rural pollution in the countryside and in the cities, although public policies had excluded the generators of destruction and environmental pollution such as low investment for the construction of popular houses and basic sanitation in Major Brazilian centers. In addition, the neglect for environmental education projects and professional qualification for agricultural producers in the country who sustained polluting (woodland burnings) and devastating practices for the biodiversity and soil in Brazilian rural areas.

Without control over real state speculation and the lack of supervision on the use of fertilizers and pesticides by the major owners of urban and rural soil in the country, the destruction of ecosystems and environmental impact grew exponentially in the 1970's.

From the National Bureau (SEMA), during the time of the Political Reopening, the public authority created an Environment National System (SISNAMA, in Portuguese) in August 1981. Federal Law 6.938 became more complex and The National Counsel for the Environment (CONAMA, in Portuguese), a system consultation and deliberative agency, began to integrate the Environment Bureau. CONAMA is composed by ministry representatives and sector entities of the Federal Administration, directly involved with environmental issues as State, municipal and Federal District environment entities, class entities and Non-governmental Organizations. There was, as of 1981, the possibility that eco-environmental issues would become not only an instrument for specific sector policies, but also a new stage of collaboration between agents and players, institutional or not, in the environmental debate. Within that context, redefining competencies on sector topics became strategic for the federal scope, which provoked strong battling in the public machinery due to the multiplicity of points of view concerning the ways eco-environmental topics were managed in multiple levels of the federative power.

The complexity of eco-environmental topics and its management players brought by the law in the beginning of 1980 contributed for the establishment of objectives, principles, direction, tools, attributions and institutions of the National Environment Policy, which contributed, according to Bredariol (2001, p18), with the vision that eco-environment preservation was 'favorable to life (and aimed) to ensure conditions for the socio-economic development of the country, national security interests and the protection of the dignity of the human race'. The regulatory instruments were ratified and protected in the Federal Constitution of 1988; however, even prior to this constitutional change in the political and institutional structure, the country's environmental policy was redefined during José Sarney's government (1985-1989).

(...) through restructuring of public agencies in charge of the environmental issue. Through the program *Nossa Natureza*, Sudepe (fishing), Sudhevea (rubber), IBDF (forest development) and Sema (environment) were unified around only one federal agency: the Brazilian Institute for the Environment and Natural Resources (Ibama, in Portuguese). (SOUSA, 2007, s/p).

After the definition of the new Federal Constitution, the decentralization of political decisions also affected the way competences over eco-environmental issues started being managed nationwide. Under a 'more preventive than corrective' perspective and the application of a decentralized federalism in terms of roles and attributions in the administrative management of the State, the responsibility over the implementation, construction, amplification and operation of activities that generated pollution started to depend on previous licensing by a state agency part of the Sisnama according to decree 99.274 of 1990. The attributions of the preventive system against situations that jeopardized the quality of life (in other words, human health, at that point) in the Brazilian territory expanded the competence of

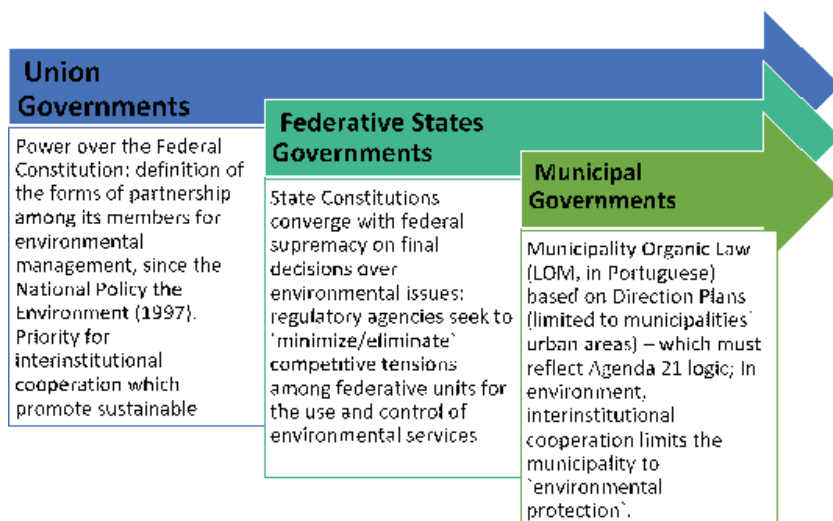
state powers – technical and political – when limited basic criteria for the studies on Environmental Impact and the Environmental Impact Report (EIA/RIMA) demanded in such cases (SOUSA, 2007).

In that sense, the improvement of technology and its dissemination in the Post-Cold War world and the acknowledgement of the necessity to increase the number of qualified professionals that would be able to deal with the causes and consequences of environmental problems in Brazil have amplified the training of eco-environmental leaderships (as well as professionals connected to specific areas) to act/inspect, locally, the quality of the management used. Once more, the technical-scientific board which was formed started reinforcing discussions on legislation at different levels of the Brazilian federalism with the objective of modifying and/or amplifying uses, control and regulations in a country with tremendous social-ecological differences. Such a change, definitively, brought eco-environmental discussions, its specific policies and the players involved to the political scope. The environmental agenda (in municipalities and states) started being edited, respecting every specificity and individual demands.

The eco-environmental debate centered, basically, on the adverse impact that each place suffered due to socio-spatial development based on western economic growth (be it through capitalism or socialism) originated a new question: what were the perspectives for development from a degraded environment in 'these places? Who was responsible for protecting the environment to guarantee the necessary natural resources for the survival of future generations, in the most varied environments and scales? The concept of 'Sustainable Development' proclaimed by the Brundland Report of 1987 – mostly known as 'Our Common Future' by the United Nations Program for the Environment (PNUMA, in Portuguese) – immersed itself in political-institutional scopes, political parties, social movements, basic, technical and academic education.

The integrative perspective of the report – players' responsibilities/ agents/ subjects in multiple levels – reinforced the idea that networks, divisions and levels (among them, the political-institutional level) of operation of the society needed to diversify so that society could effectively change in terms of eco-environmental issues. This opened up the possibility for pacts, attributions, competences and forums for discussion. In Brazil, without a doubt, such problem became more evident with the redistribution of federative functions, promoting discussions and changes in special practices by institutionalized political agents on the nature of the concept of sustainability. Sector forums promoted the discussion of global environmental issues with active participation of national and international Non-Governmental Organizations with the premise that we should 'think globally and act locally'. In that sense, federative units and municipalities expanded their participation in the decisions regarding these issues in the country.

PICTURE 1: Federative entities and interests in Brazil (Constitution of 1988)



Source: Basic Guide for Management of Municipalities, 2008. Compiled by the author.

With the Constitution of 1988 fully operational, local attributions concerning environment were defined and the decentralization of the actions and decisions became a factor in the country; however, 20 years after the new Constitution, in the Basic Guide for Management of Municipalities distributed by the Central Government since 2008, decentralization of environmental management still places the states and the municipalities, hierarchically, below the Central Power, which indicates that the Union still brings to itself the main responsibility over eco-environmental dynamics in the country, as presented in Picture 1, in the previous page.

New themes for environmental policy have been redefined. In addition, the need for more attributions of competences in political-institutional scopes and together with social movements, would generate a new international conference: UNCED-92 (United Nations Conference for the Environment and Development), known as RIO-92, carried out in Rio de Janeiro, Brazil, in 1992. That event meant that Brazil had to fight the environmental crisis and, at the same time, resume development while strengthening federative democracy and observing economic stability. The development problem would finally be equated under a socially sustainable environmental perspective and democratic decentralization.

Because of the discussions during the event, industrial pollution control and urban environment management were prioritized as a matter of local citizenship for the municipal government and credit market and technologies.

The water we drink, the air we breathe, the contamination of the food we consume, the garbage and waste we produce, the recreational, leisure and green areas or the silence we enjoy have become problems of market and of citizenship, to be provided by local governments (BRE-DARIOL, 2001, P.20).

However, the major result of that conference, from the standpoint of this article, was the definition of the Agenda 21. As the main document resulting from the summit, it presented a series of programs that can be considered fundamental instruments for the 'elaboration of public policies in all levels that benefited local initiative'. It redefined environmental policy options and the role of the Brazilian State in its multiple levels. In spite of a more institutionalized decentralization regarding ecological and environmental issues and their sustainability, a consolidation of a ministry 'stricto sensu' which, in a republican and federative sense, it is the most expressive representation of the sector to be assisted by public policies implemented in a government) was only materialized in 1999, in the second government of Fernando Henrique Cardoso for the complexity of environment nowadays. See Picture 2, as follows:

PICTURE 2 Changes in the conceptions on environment and institutional competences in Brazil after 1970



Source: <http://www.mma.gov.br>. Access on January 3, 2014. Organized by author.

For that matter, only in the beginning of the 21st century, with the creation of the Ministry for the Environment (MMA, in Portuguese), the environmental issue started being treated as a specific sector in public policy decisions, and the introduction of environmental variables became relevant criteria in political-economic decisions and project financing by official development agencies. Union, states and municipalities adopted 'a policy of responsibility and partnership through dialog, persuasion and awareness on society's part for an optimized management of natural resources' (SOUSA, 2007). The MMA (Ministry of the Environment) transferred, total or partially, to the states, municipalities, NGOs and other public and private entities, the planning and the execution of environmental policies, which is done by public authorities and multilateral agencies.

In 2002, the Environmental Conference Rio+10 took place in Johannesburg, South Africa; and in 2012, the countries returned to Rio de Janeiro for another conference, Rio +20. During both conferences, there were different opinions regarding 'advances' that international guidelines have generated for the creation of public policies that eliminate ecological and environmental problems worldwide but promote the conservation of poverty, shortage of resources and food and the destruction of nature. The problems, the discussions and analysis are abundant and there is a great number of books, work, conferences, agreements ... that may be studied and researched by whoever is interested to evaluate how such conferences affected world and Brazilian society and their expectations and obstacles; nevertheless, institutional discussions on environment have become more complex because of the management agents in the last decade (2001-2011), notably when ecology and environment became a vital part of transformational political projects of the local development structures and agreements among interdependent federative levels about 'development sustainability'. Sustainability may only be conceived among management agents and organized societies in

networks, in their respective legitimate sources. For that matter, it is mandatory to observe the role of territorial policy and the crossing of legislation by public authority and private agents.

Some final considerations about the possibilities and the obstacles for sustainability in Brazil nowadays

Ideal ecological and social-environmental policies would be those that would be able to include the several dimensions of human life in society, i.e. social, environmental, political and economic dimensions. Territorial planning and ordering should revolve around the sustainability principle, understood here as the provider of solid bases for styles of development that preserve the quality of different walks of life everywhere. The eco-environmental, thus, should be integrated to the social-spatial development policy of the states, once the implementation of that dimension means acknowledging that all growth and sector adjustment processes are conditioned by biophysical, cultural and territorial surroundings locally, nationally and globally. For that reason, such dimension should be allied with other society perspectives based on the preoccupation with human rights, values of collective and individual autonomy and the cultural identity of the people to which they refer.

The Constitution of 1988 guarantees that an ecologically balanced environment belongs to the Brazilian people, and it is the duty of society and public authorities to defend and preserve it for all generations even when the interpretation of that desire is, numerous times, contradictory and misleading. In an attempt to exercise that institutional practice, large and mid-sized Brazilian city halls have been trying to structure environmental bureaus, departments and counsels so that they are able to meet requests and complaints of the population, gradually taking charge of attributions that previously belonged to federal and state agencies. Besides, it is also their responsibility,

regarding sustainability, to favor local territorial orders because they are the ones able to express competences, limits and wishes of the people that live there (SILVA, 2013).

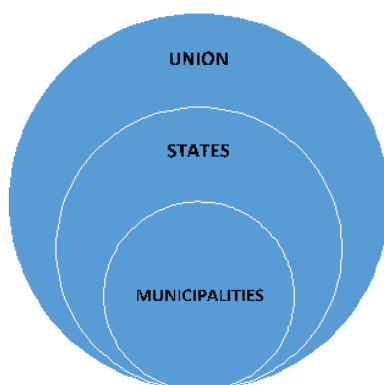
In spite of the current so-called political-territorial democracy in the country, which has been modifying the point of view of the national 'intelligentsia' on eco-environmental issues that should be prioritized – health, education, industrial policy, agriculture, urban expansion, tourism sectors and many others can only be sustainable if a ecological and social-environmental balance exists – there are, still, numerous obstacles for the adoption of these practices in an politically integrative form. In that sense, I will list some of the aspects that should be observed regarding bureaucracy and federalism itself in Brazil, so that sustainability may, actually, be included in the ecological and social-environment context in all levels of society. As follows:

- 1) Amplifying the institutional framework of the Union on conceptions and patterns for 'quality of life' in the context of Brazil's social-cultural diversity;
- 2) Encouraging discussions on what 'traditional population' is, besides more willingly characterizing indigenous, *quilombo* and extractive communities.
- 3) Recognizing historical rights of social groups over lands in the territory, attributing competence to public authority for their regulation, and consolidating their political achievements over the last decades;
- 4) Ranking less public space for political policies; it is necessary to think, geographically, the definition of laws for different groups.
- 5) Identifying the architecture of the territory (river basins, zoning and regional and eco-economic orders) that could question the old-fashioned federalism in Brazil in that the scale of spatial events is less important than legal delimitations of territories (SILVA, 2011, 2012, 2013);
- 6) Equating and equalizing territorial problems and institutionally recognizing committees, districts, consortiums, regions, zones ... that struggle, in many levels, to solve problems associated with ecological dynamics in environmental services;

7) Changing the authority pattern among the entities that compose the national political-institutional power (Union, states and municipalities), much more hierarchic (picture 3) than interdependent/collaborative (picture 4), based on Wright (1988).

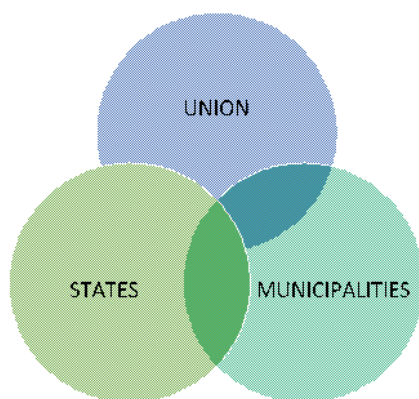
8) Rethink the complexity of the national governance for actions to be implemented in eco-environment policies. Only by that are decisions clear, sustainable and socially recognized, in all levels.

PICTURE 3: Hierarchic Authority



Source: adapted from Wright, 1988.

PICTURE 4: Interdependent Authority



Source: adapted from Wright, 1988.

9) Engaging many resources for a mass environmental education that is able to transform ideological perspectives of specific groups in more ethical social-spatial projects, across local boundaries. (GRUN, 1996);

10) Understanding that transformations are specific and connected by different processes and that contradictions and situations without immediate solution should be overcome, in the management level, so that there is no social, political and institutional immobility for the necessary changes, in time and space. That is society: ordinary, particular, global and local; an array of possibilities where success is larger with a better understanding of contradictions.

Environmental policies that gained momentum in Brazil after RIO-92 have reached a stage where they can not be considered second best in institutional policies of the federative Union. The disposition of Union, states and municipalities, the market and civil society sectors to embrace new challenges in social practices needs constant evaluation from researchers so that their origins and consequences are analyzed. Political geography tries to point the way towards reflection and adjustment of what has been accomplished so far, with the objective of amplifying the space as political arena (CASTRO, 2009), once ambiguities and contradictions like development and sustainability reveal their polysemy. Their meaning is in dispute, in permanent construction/deconstruction with unpredictable outcomes inherent of ongoing democratic processes all over the world.

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