

Articles

Socio-spatial and territorial aspects of the communities and schools of the Pantanal: diversities, contradictions and challenges of an education across geographical and social distances

Aspectos socioespaciais e territoriais dos povos e as escolas do Pantanal: diversidades, contradições e desafios de uma educação entre distâncias geográficas e sociais

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Abstract

The spatial dimension has been increasingly valued in social analysis, playing an essential role in understanding various natural and social processes. This study adopts a socio-spatial approach to explore the spatial and environmental factors that make the Pantanal a region of heterogeneous uses and appropriations. From this analysis, it becomes possible to understand the multiple territorialities that make up the Pantanal's social and educational space, including riverside, quilombola, indigenous and migrant communities. The paper discusses how these territorialities face social and environmental challenges specific to the region and examines factors such as the distances, both geographical and social, that impact on the management and running of their schools, as well as the situations of social exclusion, spatial invisibility and territorial stigmatization that affect them.

Keywords: Pantanal; Pantanal schools; educational policy; territory; territorialities.

Resumo

A dimensão espacial tem recebido crescente valorização nas análises sociais, desempenhando um papel essencial na compreensão de diversos processos naturais e sociais. Este estudo adota uma abordagem socioespacial para explorar os fatores espaciais e ambientais que fazem do Pantanal uma região de usos e apropriações heterogêneas. A partir dessa análise, torna-se possível entender as múltiplas territorialidades que compõem o espaço social e educacional pantaneiro, incluindo comunidades ribeirinhas, quilombolas, indígenas e migrantes. O trabalho discute como essas territorialidades enfrentam desafios sociais e ambientais específicos da região e examina fatores como as distâncias, tanto geográficas quanto sociais, que impactam a gestão e o funcionamento de suas escolas, além das situações de exclusão social, invisibilidade espacial e estigmatização territorial que as afetam.

Palavras-chave: Pantanal; escolas do Pantanal; política educacional; território; territorialidades.

INTRODUCTION

In addition to its natural landscape and rich biome, the Pantanal region is also expressed through the original and traditional territorialities that make it up, as well as the appropriations of other social groups, such as rural and urban populations, who are also part of the Pantanal's spatial production. Understanding the role of schools and their management in the region needs to consider the multi-ethnic and diverse spatialities that make up this space.

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Institutional and governmental practices in the Pantanal often focus exclusively on its natural dimension, neglecting the various forms of appropriation and heterogeneous use of the Pantanal territory. In addition, many studies on schools in the region emphasize the challenges faced by public and school administration due to natural conditions. However, this view tends to slip into a kind of geo-environmental determinism, in which it is assumed that nature shapes and imposes the type of social and administrative organization of space. Thus, the first argument of this paper is that although natural challenges, such as great distances, difficult routes and spatial scales, impose difficulties on the implementation and adaptation of schools in the Pantanal, this should not be interpreted as a geographical and environmental determinism that explains the forms of educational management and implementation in the region. As we will discuss, the Pantanal space itself is also shaped by the peoples and communities who live there and who give it meaning by creating and developing their identities and forms of sociability in the region.

The second argument is that contrary to a simplified view of schools adapted only to the cycles of the waters, reality shows a variety of school modalities that cater to different groups and territorialities, reflecting a much more complex physical and social morphology. The Pantanal, therefore, is not limited to a unique and singular physical nature in Brazilian territory. Furthermore, its spatial condition is that of a "used territory" (Santos, 2000), in other words, an inhabited space, crossed by various asymmetries and marked by social struggles.

If, on the one hand, there is the challenge of dealing with the different challenges of the environment, on the other hand, there is the challenge of meeting the diverse demands of the communities that make up the Pantanal, whose practices and social life follow different rhythms and reserves of meaning and sometimes conflict with the state, for whom the school is a system that arrives as an exogenous and sometimes antipodal element.

Therefore, rather than imposing top-down policies, this space, with its different forms of appropriation and ways of life, suggests more dialogical and heterarchical policies, i.e. those that allow for collaboration and the active participation of agents. Especially in the face of communities and groups seeking affirmative policies to guarantee their rights and correct historical inequalities and social exclusions.

The way in which this work has been organized initially aims to highlight the physiographic heterogeneities and anthropogenic actions in the Pantanal in relation to the challenges facing schools in this environment. It then presents in more detail the territorialities of the Pantanal, with a focus on quilombola, indigenous, migrant and riverside communities, and the challenges, needs and contradictions that surround the struggle to maintain their schools in reference to their multiculturalism.

SPACE AND METHOD

Although the social dimension of space is increasingly present in social and geographical theory, it remains little explored in education. There is no way to discuss in this work what explains these limitations or "a-spatiality" (Santos, 1982) in the educational universe. However, what can be done here is to outline which analytical aspects of space will provide the conceptual and methodological guidelines for understanding the system of schools set up in the geographical environment of the Pantanal and how this system, which is somewhat heterogeneous, is also full of diverse practices and perceptions that make the relationship between institutionalized education and the territorialities that cohabit this environment challenging and sometimes contradictory.

From the outset, it is necessary to transcend the conception of space only as a pre-existing entity, even though this is real, after all no one would deny that before and probably after us there is a materially three-dimensional world. However, since the 1970s there has been what is known as a spatial turn, with studies that have begun to approach space beyond its externality or a physical substrate or receptacle of things. This new approach to space was not univocal, but acquired different methodological spectra depending on the philosophical and/or scientific matrix, such as geography, culturalism, phenomenology and Marxism.

Work by Lefebvre (2013) and Castells (2020) has shown that space is not a neutral element in society. Factors such as collective consumption, distribution of physical structures, housing, access to services, leisure and other aspects of urban life reify a model of production and socio-economic formation, exerting and/or perpetuating social inequalities and exclusions. However, more than inscribing these social asymmetries, space is the medium that separates and also unites social subjects, which becomes a place of resistance and counter-hegemonies, which achieves conditions for multiple sociabilities and territorialities and where socio-diversity takes root and becomes visible.

In this work, we will base our thinking and socio-spatial critique on three important reference concepts: region, used territory and territoriality. The concept of region is multifaceted, and its definition varies according to the theoretical approach adopted and the historical context. In general, an understanding of regions is fundamental to geographical studies, as it allows us to understand how spaces are organized based on natural, social, political, economic and cultural dynamics.

For this study, the region is conceived as a space juxtaposed by various dynamics that constitute it and give it an organic integration and differentiation from other regions. However, the recognition of its regionality is historical and results not only from its physiognomy, but also from the collective affirmation of this integration.

According to Milton Santos (2000), the territory used does not just refer to the physical and passive delimitation of an area in terms of centralization and projection of power, but rather to the complex interactions between agents that shape a socially constructed territory. And in an analogous and complementary way, territoriality refers more to the practices of use and appropriation of social agents and groups, which can be understood as the spatial experience where materializations, meanings and symbolisms are incorporated (Haesbaert, 2007).

These conceptual lines result in two epistemic commitments of this work: on the one hand, to identify the territorialities that are part of this used territory and, on the other hand, to recognize how the school system is established in the Pantanal and how this system ends up constituting a spatial and social geometry with various asymmetries and distances.

The geographical, educational and political information base that underpins the socio-spatial analysis is derived from school distribution maps, bibliographic material and reports from informants located in social groups, schools and public administration. In order to build an analysis plan, a framework of references and cross-references of information was articulated, consisting of four axes of analysis:

- the structure and problems surrounding the school network;
- challenges and natural cycles and geographical situation;
- the communities served and their territoriality;
- and the responses of educational policies.

The following descriptions and discussions derive from these axes and analytical structure in order to clarify the general panorama of schools in the Pantanal area.

PHYSIOGRAPHIC HETEROGENEITIES AND ANTHROPOGENIC ACTIONS IN THE PANTANAL

Before going into the framework of the educational and regional system in the Pantanal, it is necessary to understand some relevant aspects of the region. Although we can't go into all the physiographic dimensions that make it up, we can at least highlight those aspects of its geodiversity and the significant anthropogenic actions whose environmental impact has an impact on the structures and daily life of schools.

Initially, and in contrast to the more general idea, the Pantanal is not only located in Brazil, where it is situated between the states of Mato Grosso and Mato Grosso do Sul, but extends into northern Paraguay and eastern Bolivia, which is known as the Chaco. In geomorphological terms (relief) it is not just a flat flood plain but undulating and with some sparsely located elevations (mountains and hills) and some depressions. As you can see, the Pantanal is not

homogeneous, which implies different forms of accessibility and adaptation for any physical structure that is implanted in its environment.

From an administrative and territorial point of view, the Brazilian Pantanal is made up of 11 sub-regions located in the states of Mato Grosso and Mato Grosso do Sul (Figure 1), covering a total of 16 municipalities. Of these, 75% of the plain is concentrated in just 4 municipalities: Corumbá-MS (45%), Poconé-MT (10%), Cáceres-MT (10%) and Aquidauana-MS (9%) - (Silva; Abdon, 1998).

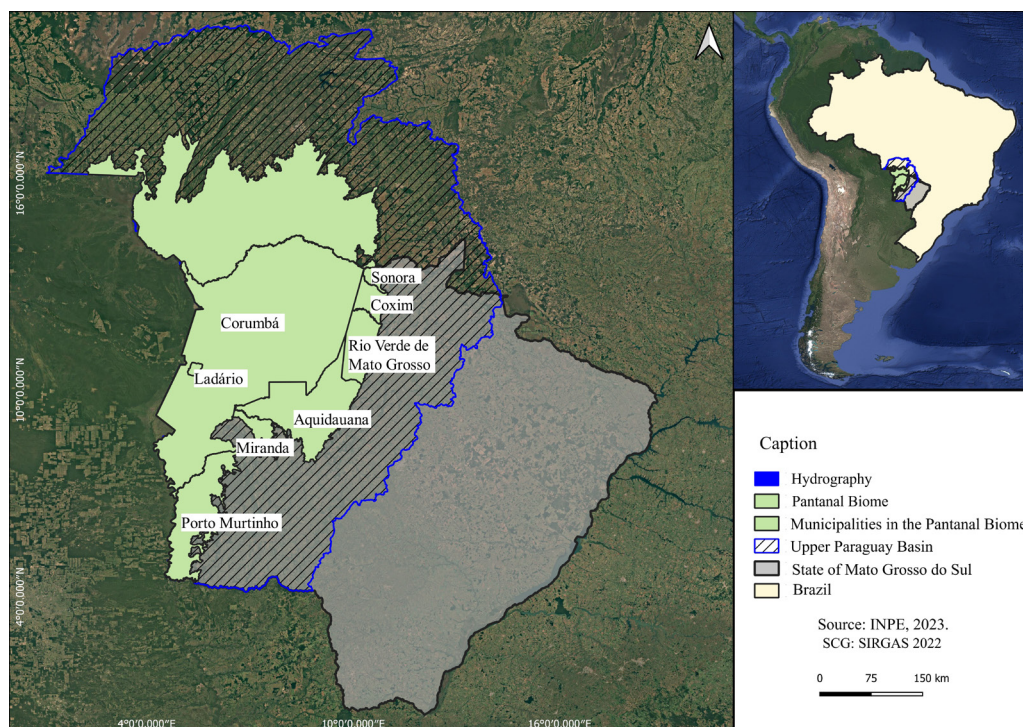


Figure 1. Administrative division of the Pantanal. Source: Adapted from Silva and Abdon (1998).

Despite the low population density in the core of the plain, the Pantanal as a whole has a significant population in its surroundings and on the adjacent plateau. Considering the population living in the municipalities that make up the Pantanal, covering both urban and rural areas, the estimates, according to data from the Brazilian Institute of Geography and Statistics (IBGE) taken from the 2010 Demographic Census and updated population projections, point to around 490,400 inhabitants. This indicates that there is significant demographic pressure on the Pantanal, which is transformed into demands and interventions on its natural environment.

Economic activities are another important aspect of the Pantanal, which is not exempt from anthropogenic impacts. Cattle ranching is the most extensive activity on the plain, whose expansion and increase in livestock have converted native forest formations into pastures; this dynamic contributes to problems of siltation, erosion and soil compaction (Ferrante; Fearnside, 2022). Mining is another exploitative activity that stands out in the Pantanal, with environmental and social impacts on communities, especially through deforestation and soil contamination (Borges; Chaudrhy; Ferreira Filho, 2005). In addition, the tourism industry is growing, which further increases the pressure on the natural environment.

Except for the highest areas and hills in the Pantanal, the rest of the territory is subject to periods of seasonal flooding from the upper reaches of the Paraguay River and its tributaries. This is a determining aspect that, for example, led to the creation in Corumbá-MS of a specific school management system in the early 2010s to cater for the population in areas subject to these floods, which is called the Water School.

In other parts of the Pantanal, flooding is not the main challenge faced by the communities and the schools set up. Instead, it is the sandy or marshy terrain, as well as the lack of adequate transportation routes, that represent the biggest obstacles. A clear example of this is the

Taquari river basin, which has been heavily affected by siltation. This has resulted in parts of the old riverbed being transformed into sandy soil, making access and mobility in the region even more difficult. This situation continues to severely affect local communities and further isolates schools in the region.

However, in addition to flooding and siltation, the Pantanal has also been affected by prolonged droughts (Thielen et al., 2020), which has made its natural system more vulnerable, with the emergence of large forest fires, a process that affects not only its ecosystem but also the living conditions of communities, who often have to move and stop schools from operating. This shows that schools in the Pantanal not only face the challenge of adapting to an unstable and vulnerable ecosystem but are also inserted in an environment subject to environmental changes caused by human intervention.

However, this adaptation cannot be viewed unilaterally, focusing only on the natural environment and ignoring the territorialities that make up this territory. It is essential that public policies, including educational policies aimed at social inclusion, consider the differences, tensions and other distances present in the Pantanal's educational system. These issues are not limited to the physiographic aspect, but also encompass groups and communities that develop their territories and knowledge in an autochthonous way.

THE TERRITORIALITIES OF THE PANTANAL AND THE TYPES OF SCHOOLING

Unlike the imagery of a Pantanal governed only by natural beauty and a geographically isolated landscape, the reality is that this space is, above all, a heterogeneous territory, shaped by various forces and appropriations. This includes both the natural environment and the economic and social agents, as well as the communities that develop their own forms of adaptation and territoriality in the region.

This socio-spatial reality cannot be ignored when it comes to school guidelines and management in spaces like the Pantanal. Unlike other contexts, such as the urban one, which despite its socio-spatial differentiation (schools in the center and on the outskirts), has greater functional stability in its network of schools. In the Pantanal, schools vary in the way they operate and have a more diffuse distribution. In addition, school dynamics in the Pantanal unfold in specific models and managements, as well as in forms of service and interaction aimed at different groups and communities.

The multifaceted nature of schools in the Pantanal stems from historical factors, such as the successive implementation of structures and forms of school attendance in different areas of the region, as well as the distribution of groups and communities that are very far apart. Even with the municipality of Corumbá acting as the region's main territorial manager, there is a diversity of services and specific demands.

Added to this are the seasonal natural elements, such as floods and droughts, as well as anthropogenic actions resulting from forest fires, which require constant structural adaptations and tend to worsen with the climate change scenario. However, the Pantanal is also characterized by a regional society, made up of multiple and combined socio-cultural elements - ethnic, economic, political, environmental, migratory and historical. This regionalization occurs through the dynamic interaction between people, groups and institutions, shaping the characteristics and dynamics of the Pantanal space.

These socio-cultural differences include riverside communities, rural settlements, indigenous groups, quilombolas, farmers, rural workers, childcare on the Bolivian border. In addition, it is a territory used and appropriated by farms, environmental preservation units, the armed forces, institutional and research areas and some under the management of non-governmental organizations.

This picture gives us a better idea of how the Pantanal region is not static and just a natural landscape. Just like in chess, there are constant movements and strategies at play, where the various pieces - be they local communities, government institutions or environmental elements - are on the move and involve constant adaptations and conflicts.

Given the natural, social and multi-ethnic conditions of the communities, the schools in the Pantanal ended up acquiring a more diffuse and heterogeneous organization. In practice, it's a

kind of network of schools on different fronts and in different sectors, even though they are all oriented towards the established goal of universal school attendance and the pursuit of social inclusion. This is the case with the Water Schools, which serve communities in flood plains, and the Indigenous Schools, which are governed by specific educational laws and regulations. In peri-urban and rural areas, especially in the border regions with Bolivia, schools face unique challenges due to the ethnic and cultural diversity of the children they serve.

However, although there is attention to and appreciation of educational actions in the Pantanal, this does not mean that school actions are free from friction and contradictions in relation to the territorialities that make up this geographical space. In fact, questions arise both about the way in which schools are integrated into communities and about the absence of a school structure in some localities, because interactions with groups and communities sometimes take place under strain and disagreements between the determinations of teaching and school organization, just as the meanings and rhythms of community life can eventually be in opposition to the dictates of a formal and exogenous educational system, as we will see below.

There is also the fact that schools, as an institution and network created and organized by the state, are a type of territorialization, since not only are they physical spatial structures, but they also institute a form of knowledge that is institutionally legitimized in the territory and, on the other hand, they are required to adapt to other cultural structures, with their own languages, practices and needs.

INVISIBILITY OF QUILOMBOLA PEOPLES IN THE PANTANAL

From here on, some of the challenges and contradictions facing democratic and inclusive education in the Pantanal region will be presented in more detail, without detaching it from its socio-diversity and territoriality.

In a more specific and normative way, since 2007 with federal decrees (Brasil, 2007), traditional peoples and communities have been recognized as culturally differentiated and their social organizations respected. Furthermore, the valorization of their traditions and the strengthening of a dialogical relationship between the state and these communities has been guaranteed, including greater participation in school management.

Despite this institutional anchoring that aims to meet the demands of traditional peoples and communities, the reality is that, in practice, schools in the Pantanal, both municipal and state, despite many successes, find it very difficult to project a policy of inclusive democratization of education in the territory in line with the heterogeneity of territorialities and culturalities of this space.

This is the case of the Quilombola Communities located in the north of Mato Grosso and in the Pantanal, which are home to a total of 6 schools, with a teaching staff of 100 teachers and 1513 students enrolled, according to data from INEP (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, 2010). However, despite the fact that the management of Quilombola schools should preferably be carried out by Quilombolas, the community in Mato Grosso has been fighting for the right of Quilombola teachers to occupy positions in the community's own schools, in order to establish a connection between the community's knowledge and narratives and the national basic curriculum. This aspect not only occurs with the Quilombola Communities of Mato Grosso but is also somewhat recurrent in the rest of the Pantanal.

In the specific case of quilombola schools, these are difficulties that, on the one hand, are normative, since the legislation, especially CNE/CEB Resolution No. 8/2012, which sets out the guidelines for quilombola education, leaves some gaps, especially in terms of how to assert their autonomy in school management. On the other hand, there is a dialogical distance between the leaders of these communities and the institutional spheres at local and regional levels, in order to guarantee the rights of a differentiated basic education.

In the Pantanal, an even more acute socio-spatial contradiction emerges: while the building and infrastructure needs of the more distant communities are partially recognized, this is not the case for the Quilombola Community in Corumbá, MS. Despite being in an urban area,

where economic and institutional resources are theoretically closer, this community still doesn't have a school that meets its cultural and historical specificities.

This absence has forced children and adolescents to be enrolled in both municipal and state schools. Furthermore, although education for traditional and indigenous peoples requires a differentiated curriculum and Pedagogical Political Project, this is not reflected in the schools that house quilombola students, as highlighted in Souza's study (2021).

Here, social distance prevails in the sense of Bourdieu (2007), which, although it does not correspond to physical distance, implies social distinctions and exclusions from certain goods and rights. What emerges is that, despite composing their corporealities and traditional territoriality in the Pantanal, they lack visibility and recognition of their rights and the reproduction of their socio-cultural practices, which should include the manifestation of these practices and ancestry in school spaces.

TERRITORIAL STIGMATIZATION ON THE PANTANAL BORDER

In the Pantanal's rural-urban transition and border area, the situation arises of students who live the experience between two nationalities in the territory - an inter-territorial experience. These are young people who live in Bolivia but were born or not born in Brazil and are therefore living an experience of citizenship between territories.

Transit between two territories is what is known as transterritoriality, because the subjects are not just practicing the mobility of coming and going; they also enter and leave these territories with their cultures, languages, customs and perceptions, altering and being altered - sometimes in a hybrid way - in their passages and stays (Haesbaert, 2009). This trans-territoriality on the Pantanal's populated border implies several challenges in dealing with migrants of various nationalities, such as Bolivians, Haitians, Peruvians and Venezuelans. This imposes adaptation challenges for both the individuals and the institutions that organize the border area.

In the case of the school institution, this transit is experienced in some schools in the Pantanal, showing permanence and proxemic (proximity in body and space), ethnic and linguistic interactions. The schooling of children who are citizens of Bolivia and Brazil faces various challenges in terms of integration. Many Bolivian parents see these schools as an opportunity for social and economic inclusion for their children, who generally have Brazilian citizenship because they were born in Brazil, although they live on the Bolivian side.

However, this reality is lived as an ambiguous territorial experience for these children and adolescents. They are Brazilian, but they carry their Bolivian identity in their bodies and language and are seen as foreigners in Brazilian schools. Despite the interaction between Brazilian students and teachers, the children and adolescents who come from Bolivia face various situations of distance and conflict due to ethnic and linguistic issues (Ramos; Paula; Bueno, 2023).

There are difficulties in communication and interaction in the face of linguistic pluralism, as they live with Portuguese, Spanish and linguistic variations from the indigenous communities of both countries. In 2012, in partnership with the municipality of Corumbá-MS and the federal sphere, the Intercultural Border Schools Program (PEIF) was implemented, which was important in training teachers and promoting intercultural border education, but the program was discontinued and created a vacuum of actions that could support these border schools.

Nevertheless, the fact is that these students who live between two territories need to assimilate the knowledge institutionalized in the school on the Brazilian side and the rules that apply there. This is an ambiguous situation: on the one hand, the interests of parents who want their children to be better placed socially, with a preference for one nationality for their education, and on the other, their children who see themselves as entering a territory different from that of their origins.

Added to this are the prejudices and ethnic and territorial stigmatization they face, i.e. living somewhere else and/or having a different ethnic identity becomes a source of prejudice and exclusion (Wacquant, 2006). Part of this stigmatization sometimes stems from situations of conflict with other groups at school, manifesting itself in difficulties of acceptance and belonging among students. Ramos, Paula and Bueno (2023), for example, emphasize the

clashes and differences that, in certain circumstances, occur between young people from rural settlements and students from Bolivia, who are often derogatorily called “Bolivianinhos,” “bugres” or “tchocos.”

These are territorial stigmatizations (Wacquant, 2006), which not only belittle people on the basis of their behaviour and corporeality, but also disqualify their territorial and ethnic origins.

THE STRUGGLE OF INDIGENOUS SCHOOLS TO MAINTAIN THEIR LANGUAGE AND TRADITIONS

The indigenous peoples of the Pantanal include the Terena, Kinikinau, Kadiwéu, Guató, Ofaíé and Atikun, distributed in several villages that constitute ethno-territories - that is, spaces of collective belonging where the becoming of their ancestry, identities, customs, ways of life and social organization is projected (Moore, 2016). Since 2009, Decree No. 6,861 has regulated the right of indigenous peoples to define their ethnoeducational territories by consensus, precisely with the aim of fostering greater autonomy and power to manage their school processes.

An important spatial and administrative aspect is that the Ethnoeducational Territories juxtapose or cross state administrative territories or municipalities. In addition, the affirmation of these territories is the result of a consensus between the communities so that they can be recognized, as well as a process of territorial reconquest, which often involves conflicts, land issues and legal challenges.

And the guarantee of autonomy is, in general, the most important step, as with other communities, in ensuring that there is indigenous school education. The school in the villages is an essential framework for the cohesion and social reproduction of the community, above all in the preservation of the language and cultural practices. That's why it's also important to have indigenous teachers from the community itself, who end up guaranteeing the continuity of the transmission of indigenous knowledge.

In the Pantanal, the Ethnoeducational Territory of the Peoples of the Pantanal has been consolidated since 2015, incorporating six ethnic groups whose ethno-territories cover ten municipalities. This territorialization aims to provide differentiated teaching and a multilingual school (Lourenço; Moura, 2022; Meira, 2023). One of the challenges for these schools that are part of this ethno-territory is precisely to create or adapt methodologies and curricula that make interculturality possible, given the tension between indigenous and traditional knowledge and the power of outside knowledge, whose universal model tends to impose itself in the foreground.

This is a central challenge for these communities, since it is a struggle for their cultures not to be erased or silenced (Lourenço; Moura, 2022). In this sense, the preservation and continuity of the native language is essential in indigenous schools, as it allows the history and cosmological universe of the community to be transmitted, as well as being one of the structural elements of the cohesion and bonds that unite them ethnically, even though it is not the only element of their indigenous identities. But the fact that it is preserved remains a symbolic link to their territory and ancestry.

However, as reported by Gonçalves (2018), this preservation is always at risk, as in the case of the Terena language in the community of Nioque in the Pantanal, where many no longer know the language, due to assimilationist and interventionist strategies in the past, such as institutional and religious ones that were implanted in their communities, generating discouragement or even the erasure of the native language in favor of the Portuguese language and external values.

Another aspect is the challenge of increasing the number of permanent indigenous teachers, who are still few in number in the state schools that serve indigenous communities in the Pantanal (Meira, 2023). One initiative to resolve this issue was the creation of an Indigenous Intercultural Degree course at the Federal University of Mato Grosso do Sul, which has shown results in the training of indigenous teachers who will work in village schools.

On the other hand, there is an effort to recover cultural unity, which is what is happening with the Guató people, who were expelled and harassed from their lands in the Pantanal and now live scattered on the outskirts of cities, especially in Corumbá. On the other hand, many, in

order to survive the extermination, have managed to find refuge and set up their village on a river island in the Paraguay river and on the border with Bolivia. This shows that sometimes spatial physiography, distances and relative isolation end up being a territorial advantage.

The Guató village, called Uberaba, is the last remnant of this indigenous ethnic group in the Pantanal, which can only be reached by boat and air transportation, both to the village and to the state school located there. Despite the geographical distance, with the efforts of those who remain, they have managed to get their indigenous school set up by the state government and have recently received support from federal entities to establish better infrastructure for their community.

What emerges is that, even though in recent years indigenous communities have been recognized and won the right to take back their lands in the Pantanal, the challenges of maintaining their practices and traditions are still great. For this reason, indigenous schools end up being a space that is not only pedagogical but also socio-cultural, since the matrix of their cultures is integrated with new knowledge there, and it is from there that they can rebuild their cultural heritage.

RIVERINE AND RURAL POPULATIONS AND THE CHALLENGES OF A SCHOOL BETWEEN DISTANCES IN THE PANTANAL

One of the schools that serves the population of the Pantanal plain is officially called Escola das Águas (School of the Waters), run by the municipality of Corumbá-MS, whose administrative territory covers approximately 44% of the Pantanal (Silva; Abdon, 1998). These are schools that serve a population that spreads out over the plains and river basins, mainly including riverside populations and rural workers, but they also welcome other populations scattered in other communities, institutions and farms.

Each of these schools has its own peculiarities, but in general, the challenges of these lowland schools begin with their adaptations, which often take place within the farms themselves or in partnership with military institutions, civil and non-governmental organizations. Another difficulty is maintaining the logistics of sending supplies and the conditions for teachers to stay in these schools. In general, there are no paved roads, water routes take a long time and tractors are often improvised in order to cross not only long distances but also sandy and swampy terrain.

There are also other challenges for these schools, such as maintaining the school calendar, since during periods of flooding school activities have to be stopped, but not only the natural cycle has to be taken into account. As has been highlighted in this work, the schools are in relationship with communities and populations whose economic and cultural practices are well rooted in the long history of their territorialization in the Pantanal. School management often has to deal with these characteristics, which sometimes clash with educational guidelines and regulations.

For example, many young people help their parents and the community with domestic work, livestock farming or other economic activities. These activities are dictated by the Pantanal's flood and ebb cycles. Although these schools try to make their opening times more flexible in order to adjust to this cycle, there is still friction between the school and the community. This tends to occur more frequently with the growing presence of comprehensive schools, which require a longer daily stay. This process creates tension between the school's objectives and those of the parents, who are also looking for their children to learn work practices.

Likely, school time suppressed by work time is also one of the explanations for the age-grade distortion in the Pantanal, since there are a significant number of children whose age does not correspond to the grade they should be attending (Oliveira, 2018).

Furthermore, although the presence of schools represents a break with the illiteracy that was the norm in the Pantanal in past periods, a large proportion of adults are still illiterate (Oliveira, 2018; Abreu, 2018). This, in turn, implies the need for schooling aimed at this adult population. Once again, these are schools whose demands and challenges are increasing due to a more inclusive service, while at the same time requiring more flexible educational projects adapted to the condition of these workers.

The fact is that, in some regions of the Pantanal, the economic and social situation of these populations is often quite precarious. Basic demands range from a lack of clothing and food to the absence of birth records for children and adolescents (Abreu, 2018). This shows the social importance of the school, since its institutionality in the Pantanal can be a turning point for improving opportunities for these communities, although, as we have tried to demonstrate in this work, there are still many challenges, tensions and contradictions to be overcome.

FINAL CONSIDERATIONS

To think about the Pantanal is, first and foremost, to understand that nature and its processes are not in opposition to the various forms of territorial occupation practiced by the communities that make it up. In fact, nature and its cycles are the essence of these communities' knowledge and sense of life. The official school system in the Pantanal is part of this regional society, in that it includes heterogeneous schools that seek to meet the traditional and ancestral territorialities of this geographical environment.

These schools need to adapt to nature, to the groups and to their function as spaces for learning and living together. This is a central aspect, because schools are not elements that are exogenous to the Pantanal reality; they are integrated both with nature and with the region's territorialities and ethnocultures.

Thus, schools in the Pantanal are pedagogical spaces, but also spaces for affirming the territorialities of the peoples who cohabit and produce this space. This work shows how communities, including migrants, quilombolas, rural and indigenous populations, face various challenges in maintaining the functional and identity integrity of their schools. These challenges include overcoming not only geographical but also social distancing, which ends up generating situations of exclusion, spatial invisibility and territorial stigmatization that affect these communities and their schools.

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REFERENCES

- ABREU, C. M. M. **A implantação das escolas ribeirinhas no Pantanal corumbaense**: um elemento de enfrentamento ao trabalho infantil Corumbá-MS. 2018. Dissertação (Mestrado em Educação) – Universidade Federal do Mato Grosso do Sul, Campus do Pantanal, 2018.
- BORGES, J. R. P.; CHAUDRHY, F. H.; FERREIRA FILHO, P. Representações de comunidades tradicionais: um instrumento para a gestão dos recursos hídricos no Pantanal. **Revista de Ciências Sociais e Econômicas**, São Paulo, n. 23, p. 73-80, 2005.
- BOURDIEU, P. **A distinção**: crítica social do julgamento. São Paulo: Edusp; Porto Alegre, RS: Zouk, 2007.
- BRASIL. **Decreto nº 6.040, de 07 de fevereiro de 2007**. Institui a Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais. Brasília: Casa Civil, 2007.
- CASTELLS, M. **A questão urbana**. 7. ed. São Paulo: Paz e Terra, 2020.
- FERRANTE, L.; FEARNside, P. M. Brazil's Pantanal threatened by livestock. **Science**, Washington, D.C., v. 377, n. 6607, p. 720-721, 2022. DOI: <http://doi.org/10.1126/science.ade0656>. PMID:35951692.
- GONÇALVES, D. L. **O território etnoeducacional povos do Pantanal e sua relação com a Escola Estadual Indígena de Ensino Médio Angelina Vicente na Aldeia Brejão, Nioaque-MS**. 2018. Dissertação (Mestrado em Antropologia) – Universidade Federal da Grande Dourados, Dourados, 2018.
- HAESBAERT, R. Dilema de conceitos: espaço-território e contenção territorial. In: SAQUET, M. A.; SPOSITO, E. S. (eds.). **Territórios e territorialidades**: teorias, processos e conflitos. São Paulo: Expressão Popular, p. 95, 2009.
- HAESBAERT, R. Território e Multiterritorialidade: um debate. **Revista Geographia**, Rio de Janeiro, ano IX, n. 17, 2007.
- INSTITUTO NACIONAL DE ESTUDOS E PESQUISAS EDUCACIONAIS ANÍSIO TEIXEIRA. **Censo Escolar, 2010**. Brasília: MEC, 2011.
- LEFEBVRE, H. **La producción del espacio**. Madrid: Editora Capitain Swing, 2013.

LOURENÇO, D.; MOURA, N. S. P. Angelina Vicente: uma escola indígena no etnoterritório *In: LÚCIA, V. et al.* (org). **Diferenças & alteridades**: abordagens perspectivas dos estudos culturais. Campo Grande, MS: Ed. UFMS, 2022. p. 85-113.

MEIRA, F. A trajetória da Educação Escolar Indígena no Brasil e seus desdobramentos entre os Terena no Mato Grosso do Sul. *In: GONÇALVES, M.C.S; PIMENTA, D.C.F.G. (eds.). Educação e Conhecimento*. Belo Horizonte, MG: Editora Poisson, 2023. p. 63-77. DOI: <http://doi.org/10.36229/978-65-5866-304-1.CAP.05>.

MOORE, A. Ethno-territoriality and ethnic conflict. **Geographical Review**, New York, v. 106, n. 1, p. 92-108, 2016. DOI: <http://doi.org/10.1111/j.1931-0846.2015.12132.x>.

OLIVEIRA, F. R. Os nexos da educação integral no Pantanal de Corumbá-MS: práticas de ensino na Escola Jatobazinho. 2018. Dissertação (Mestrado em Educação) – Universidade Federal do Mato Grosso do Sul, Campus do Pantanal, 2018.

RAMOS, E. C. M.; PAULA, E. G.; BUENO, E. Um olhar etnogeográfico sobre a experiência escolar de jovens brasileiros que vivem a inter/transterritorialidade na fronteira Brasil-Bolívia. **CIÊNCIA GEOGRÁFICA**, Campinas, v. 27, p. 245-262, 2023.

SANTOS, M. **Espaço e Sociedade**. Petrópolis: Editora Vozes, 1982.

SANTOS, M. **Por uma outra globalização**: do pensamento único à consciência universal. Rio de Janeiro: Editora Record, 2000.

SILVA, J. S. V.; ABDON, M. M. Delimitação do Pantanal brasileiro e suas sub-regiões. **Pesquisa Agropecuária Brasileira**, Brasília, v. 33, p. 1703-1712, 1998.

SOUZA, J. B. A. **Existir e Resistir**: as geografias das comunidades quilombolas no município de Corumbá - MS. 2021. Dissertação (Doutorado em geografia) – Universidade Presbiteriana Mackenzie, São Paulo, 2021

THIELEN, D. *et al.* Quo vadis Pantanal? Expected precipitation extremes and drought dynamics from changing sea surface temperature. **PLoS One**, San Francisco, v. 15, n. 1, p. e0227437, 2020. DOI: <http://doi.org/10.1371/journal.pone.0227437>.

WACQUANT, L. A estigmatização territorial na idade da marginalidade avançada. **Sociologia: Problemas e Práticas**, São Paulo, n. 16, p. 25-39, 2006.

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