



Mercator - Revista de Geografia da UFC
ISSN: 1984-2201
mercator@ufc.br
Universidade Federal do Ceará
Brasil

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Mercator - Revista de Geografia da UFC, vol. 17, no. 8, 2018

Universidade Federal do Ceará, Brasil

Available in: <https://www.redalyc.org/articulo.oa?id=273655956001>

Discourse analysis of the authors/actors from the Nhecolândia Pantanal landscape

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Redalyc: <https://www.redalyc.org/articulo.oa?id=273655956001>

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Received: 28 May 2018
Accepted: 20 June 2018
Published: 15 July 2018

ABSTRACT:

The inclusion of the analysis of feelings in the environmental approach reflects the different views regarding the landscape of a Territory. Thus, with a methodology based on semi-directed interviews, applied to the pantaneiros, inhabitants of the Pantanal for over twenty years, this study aimed, through discourse analysis, to understand the interactions between the authors/actors of the Pantanal landscape and nature, especially with the elements that make up the landscape of the Pantanal of Nhecolândia. The results showed a proximity, awareness and intimate relationship in view of the environmental importance of the area and the elements of the landscape, as well as detecting signs of a relationship leading to the prominence of a cultural conflict between pantaneiros and the new landowners in the Pantanal of Nhecolândia.

KEYWORDS: Culture, Pantaneiro, Semi-directed interviews.

RESUMO:

A inclusão da análise de sentimentos na abordagem ambiental reflete os diferentes olhares em relação à paisagem de um Território. Sendo assim, com metodologia baseada em entrevistas semi-dirigidas, aplicadas a pantaneiros, habitantes a mais de 20 anos no Pantanal, esse trabalho objetivou, através da análise do discurso, compreender as interações entre os a(u)tores da paisagem pantaneira com a natureza, e sobretudo com os elementos que compõem a paisagem do Pantanal da Nhecolândia. Os resultados demonstraram uma proximidade, conscientização e relação íntima perante a importância ambiental da área e dos elementos da paisagem, além de detectarem indícios de uma relação que caminha para a eminência de um conflito cultural entre pantaneiros e os novos proprietários de terras no Pantanal da Nhecolândia.

PALAVRAS-CHAVE: Cultura, Pantaneiro, Entrevistas-semidirigidas.

RÉSUMÉ:

L'inclusion de l'analyse des sentiments dans l'approche environnementale renseigne sur les différents regards portés au paysage d'un territoire. Ainsi, grâce à une méthodologie basée sur des entretiens semi-directifs, appliqués aux Pantaneiros, résidant de plus de 20 ans dans le Pantanal da Nhecolândia, cette étude vise, à travers de l'analyse du discours, à comprendre les interactions entre les acteurs/auteurs du paysage du Pantanal avec la nature, et en particulier avec les éléments qui composent le paysage du Pantanal da Nhecolândia. Les résultats ont montré une proximité, une sensibilisation et une relation intime face à l'importance de l'environnement de la région et des éléments du paysage, en plus d'éléments indiquant le cheminement vers un conflit culturel entre les Pantaneiros et les nouveaux propriétaires de fermes du Pantanal da Nhecolândia.

MOTS CLÉS: Culture, Pantaneiro, Entretiens semi-directifs.

INTRODUCTION

According to Souza (2010) a new possible approach in Geographical Science concerns the perception of the individual of his space of life. The analysis of the different modes of apprehending and reacting to the landscape by people in their daily life is also an important element to deepen the knowledge about the socio-environmental dynamics in a given territory.

Such statements are in line with Risso's (2008, p. 72) reflections on the inclusion of feelings into the view of landscape. There is an explanation that affectivities, experiences, values, symbolic culture, experiences with Nature, or perception, reflect different feelings and behaviors with respect to the landscape. For each person or group, the landscape will have a meaning, because people attribute different values and meanings to landscapes, translated into feelings of being rooted in or detached from places.

The gaze directed at the landscape is sometimes subjective and plural. Landscape reality is perceived by observers of a place, a time, a culture and the object of a presentation that is a representation. [...] The landscape does not exist in itself, it is a particular look at a fragment of geographical reality, a historical and cultural invention. (PASSOS, 2006. p. 68).

The historical transformations and the current dynamics of the landscape must be approached with an integrated analysis, emphasizing the existing relationships between the elements, that is, with an emphasis on the determining processes of the construction of the landscape.

In recent decades, the elements that make up the Pantanal's landscape have been the frequent target of analysis, principally referring to the Pantanal's sub-region of Nhecolândia, a central area of the Mato Grosso Pantanal, which can be found in the works of Brasil (1982) apud Queiroz Neto, 2000), Cunha (1980), Mourão (1989), RADAMBRASIL (1982), Almeida and Lima (1959 apud FERNANDES, 2000), Soares et al. (2003), and Sakamkoto (1997), among others. However, it should be noted that the analyzes in these works refer only to the dynamics of the physical-natural elements that make up the landscape.

Man is also part of the constituent elements of the landscape of the Pantanal of Nhecolândia and actively participates in the dynamics of construction and reconstruction of the landscape, accelerating or decelerating naturally originating processes based on socio-economic, political and / or even cultural (everyday relationships) objectives.

Therefore, it is of the utmost importance for the comprehension of the environmental complexity of the dynamic of the landscape of the Pantanal of Nhecolândia that an analysis based on an understanding of the daily aspects of the direct and indirect human agents of the landscape be carried out, since they are considered to be responsible for its social construction, also exercising the role of actors and / or authors within this process.

Therefore, it is necessary to analyze the relationship of this element (man) with the other constituent elements of the Pantanal of Nhecolândia's landscape.

Societies / people perceive their space of experience, acquire, form and transmit knowledge about their places and territories through language, sounds, flavors, smells, and images [...] This is the perception that defines the degree of individuals' reaction to the landscapes, the attribution of values, feelings and identity. It expresses which landscapes really are part of life and the day-to-day of each one of the individuals and their particularities. (SOUZA, 2010. p.135)

Thus, the objective of this study is to identify and understand the interactions between the actors/authors of the Pantanal landscape and nature through discourse analysis, as well as their perception of the author / actors who make up the landscape of the Pantanal of Nhecolândia.

METHODOLOGY

Souza (2010) presents a schematic representation of the convergence of different views on the territory and the landscape (Figure 1), elaborated under the premise that "all forms of an individual's comprehension of their living space provide us with important elements to deepen our knowledge of the socio-environmental dynamics in a given territory" (p.43).

The author elucidates that people express the positive or negative characteristics, the good or bad about the places in which they live, using value judgments. Thus, the feeling of belonging (or not) to a particular place is reflected based on identity and from longings and projects, the future individual or collective ambitions,

fears and expectations regarding the transformations of the future are revealed, which, consequently, will be materialized in the landscapes existing in the territory.

In this way, based on memory, on the recollections of past events, of facts that marked / shaped a certain way of seeing and acting, which help in the identification and / or relationship with the marks left on places, the act of declaring the transformations that denounce the changing dynamics of the landscape is facilitated.



FIGURE 1

Schematic representation of the convergence of different views on the territory and the landscape.

Thus, of the authors/actors of the landscape, that is, among those who individually or collectively contribute directly or indirectly to the production, organization and reorganization of the landscape in the Pantanal of Nhecolândia (farm owners, pantaneiros, institutional leaders, and others), the pantaneiro is the most noteworthy in the composition of the Pantanal's landscape.

The Pantaneiro Man

Proença (1997) points out that the Indians began the history of human occupation in the Pantanal, where for centuries they lived a wandering and free life. In the words of the author, they were the lords of the land, adapting themselves along the rivers or in the surrounding mountains, forming tribal and linguistic groups, each with its customs, boasting of their good qualities of hunters in an area full of biodiversity. Such values became the basis of the South-Matogrossense and Matogrossense culture, and thus, had a strong influence on the music, beliefs, legends, art, dance, food, etc.

Accordingly, they had a fundamental role in the historical and territorial formation of the thus far forgotten Province, opening up trails, teaching paths to the civilizers, with whom some tribes had peaceful contact, submitting to them like pack animals, serving as instruments to ambitions of conquest, subjugating themselves to a sad and shameful slavery. (PROENÇA, 1997, p. 96)

In a historical leap for the region, we reach the present inhabitants of the Pantanal, not forgetting that in this temporal gap, besides the aforementioned indigenous base, a mixture based on relationships and conflicts between Paraguayans, Bolivians and explorers, especially from the rest of the Central-South region of Brazil, is the basis for understanding the individual who is now known as the Pantaneiro Man, Pantaneiro or Pantaneiro Peon. It should be emphasized that even with this distinct cultural mix this figure developed a very particular identity, real and well evidenced in stories, tales, poetry, music, cinema and other artistic expressions.

Vieira (2004) points out that the Indian is present in all of the characteristics of the formation of the pantaneiro. They are a people who live from nature with the elements, earth and water whose limitations imprint on their lives an integrated and distinct way from other peoples. Apparently it is a hard and difficult

lifestyle for those who are not accustomed to the way of life. Over time, however, they have become an intrinsic part of their environment, living in harmony with nature, with the family and with themselves.

According to Espindola (2010), another inherent fact of pantaneiro culture is the well-known empirical wisdom of the men of the Pantanal, who have a special way of observing and interpreting natural phenomena in order to guide daily practices. This way of acting, guided by empirical knowledge, tested in various daily experiences and passed on by successive generations, has facilitated the management of daily activities for many decades.

The countryman, as he is also called by local people, understands natural phenomena without ever having studied them in a formal school. They know when to plant, when to harvest, when to separate the cattle. The inherent patrimony of this natural space requires its identification and maintenance within its characteristic. Violation destroys their culture by trying to impose an external culture. Peon or farmer, integrated with everything that surrounds them, know that the actions of nature, floods and droughts, are responsible for the wealth and life in the Pantanal. Distances and difficult access to other regions have made them accustomed to isolation and loneliness, which is broken when they express the feeling of cooperation in the management of cattle or in the participation in traditional festivities on neighboring farms. (VIEIRA, 2004, p. 01)

According to Espintola (2010), the pantaneiro universe is closely linked to the natural cycle of the Pantanal, because to survive in such an inhospitable environment, the caboclo of the Pantanal need to know, respect and, above all, understand the environment to make it their home and their way of life.

Such formulations about the culture of the pantaneiro are sufficient to justify the choice of this individual for the conceptions of the cultural aspects objectified in this work. This individual's relationship to the elements and dynamics of the formation and transformation of the landscape will also reflect the responsibility and participation of the other individuals who make up this mosaic of human elements, in constant interconnection with the landscape of the Pantanal of Nhecolândia.

Therefore, we selected male and female inhabitants of the study area as collaborating targets in the project to determine their identity, relationship, knowledge and observation of the dynamics of formation and transformation of the landscape in the Pantanal of Nhecolândia.

The Semi-Directed Interviews

Based on these factors, a list of sixteen questions was drawn up to create a semi-directed interview script (Table 1), which guided the dialogue with the collaborating targets, in order to extract the greatest amount of lived, observed and reported inferences and references, as well as correlating them with the scientific publications on the natural dynamics related to the landscape of the Pantanal of Nhecolândia.

After the interviews were completed and transcribed, their analysis was carried out in order to extract the oral fragments that are significant for the intended discussions. It is necessary to relate them to the representative images acquired at the time of the interviews, which reveal the perception of the individual being interviewed.

TABLE 1
Script of semi-directed interviews

Questões	Justificativa/objetivo
1 – Nome, idade, estado civil, com quem mora.	Conhecer o perfil do entrevistado;
2 – Quanto tempo mora no Pantanal da Nhecolândia? (E os antepassados?)	Identificar o tempo de relação do entrevistado com o lugar;
3 – Gosta de viver no Pantanal da Nhecolândia? Por quê?	Analisar o sentimento de identidade, de pertencimento;
4 – Quais os pontos positivos e negativos de viver no Pantanal da Nhecolândia?	Apreender as dificuldades e benefícios cotidianos da vivência no lugar, de acordo com a percepção do entrevistado;
5 – Existem diferenças na região desde o período que o(a) Sr(a). chegou aqui até hoje? (histórias contadas pela família)	Identificar a percepção do entrevistado, vivida ou adquirida através de histórias familiares, com relação as transformações no Pantanal da Nhecolândia.
6 – Quando o Sr./Sra. pensa no Pantanal da Nhecolândia, qual a principal característica que acha que o diferencia dos outros Pantaneais?	Entender quais elementos da paisagem o entrevistado considera identitário para a região do Pantanal da Nhecolândia;
7 – Qual paisagem ou elementos da paisagem o Sr./Sra. enviaria em forma de fotografia para que um parente distante ou um amigo conhecesse essa região? Por quê?	
8 – Qual imagem o Sr./Sra. levaria deste lugar no caso de uma mudança amanhã? Por quê?	Extraír um sentimento do entrevistado em relação à uma paisagem cotidiana, íntima;
9 – Qual paisagem o Sr./Sra. pensa que deveria ser fotografada devido a possibilidade de não existência futura? Porque essa imagem?	Analisar se o entrevistado possui alguma percepção de mudanças ou transformações drásticas nas paisagens;
10 – De que forma o Sr./Sra. pensa o futuro deste lugar?	Verificar as perspectivas e anseios do entrevistado em relação à região do Pantanal da Nhecolândia;
11 – Quanto as lagoas da região, quais as principais diferenças entre elas?	Analisar o conhecimento empírico do entrevistado sobre as características das lagoas: baías, salinas e salitradas;
12- Especificamente sobre as lagoas Salitradas: quais as diferenças entre elas em períodos de seca e cheia?	Analisar a percepção do entrevistado em relação às transformações nas paisagens das lagoas salitradas.
13 – O Sr./Sra. sabe dizer o motivo do nome Salitrada?	Compreender a origem do nome e saber se se trata de uma toponímia regional.
14 - Qual a importância dessas lagoas (baías, salinas e salitradas) para o Pantanal da Nhecolândia e para o Sr./Sra.?	Identificar a relação cotidiana do entrevistado com as lagoas e a relevância da mesma para o entrevistado (ambiental ou economicamente);
15 – Sua vida aqui no Pantanal da Nhecolândia está melhor agora ou no passado? Por quê?	Apreender quais e como as transformações sócio-econômicas influenciam a opinião dos entrevistados sobre a qualidade de vida atual;
16 – O que você gostaria que desaparecesse ou aparecesse na região para melhorar a qualidade de vida do Pantaneiro? Por quê?	Identificar quais aspectos podem ajudar ou prejudicar na melhoria da qualidade de vida, de acordo com a percepção e o cotidiano do entrevistado.

Source: Adapted from Souza (2010)

It is also worth noting that for the sake of better methodological clarity the oral fragments transcribed in the results of this article preserve the informality of the pantaneiros' speech. They are identified by pseudonyms in order to preserve their identity, the true facts are only the age and the duration in the pantaneiro environment, information considered important for the scientific and methodological coherence of this work.

RESULTS AND DISCUSSION

The use of semi-directed interviews made it possible to approach twelve people residing in Farms located within the Pantanal of Nhecolândia area.

Despite the great extension of the area, the demographic density, together with the difficulty of access to the farms were the main factors that made it difficult to do more interviews.

The interviews have an average duration of 28 minutes, the interview script presented above was followed as the guiding element.

Profile of respondent

Of the twelve interviews, only ten were selected, taking into account criteria such as the age of the interviewee, how long they had lived in the region of Pantanal da Nhecolândia, as well as the content of interviews (clarity of the information).

The ten selected interviews were carried out with nine men and only one woman, as, except for the woman in question, who works as a cook on the farm, and one of the interviewees who owns a small bar located in Curva do Leque, on the far west of the lower Nhecolândia area, the remainder are rural workers on farms and work principally with cattle management and rearing activities.

The age of the interviewees ranges from 33 to 81 years of age, with 40% being over 60 years of age and the remainder being below 50 years of age. Despite this, 90% have more than 20 years of residence in farms in the Pantanal of Nhecolândia.

As for marital status, only the woman is single. However, some of the men interviewed do not live with their wives, since two of them said that their respective wives live in Corumbá with their children. The other married men interviewed claimed to live only with their spouses, as their children do not live on the farms; they are students in Corumbá, Miranda or Campo Grande.

Pantanal Identity

When asked whether they liked living in the place and / or to present the positive and negative points of living in the Pantanal of Nhecolândia, the answers were unanimous in three factors:

Firstly, because it is pantaneiro, that is: "People say that I'm pantaneiro, right?" (Laughs) "I'm a legitimate pantaneiro, son of a Paraguayan, I know this region from one end to the other." (Hermínio E., 80 years old and 80 years in the Pantanal).

Another factor is being accustomed to the tranquility of the place: "I was brought up here right, when I leave I can't get used to it anymore. It's quieter here," (Augusto S., 47 years old and 21 years in the Pantanal)

Here you get used to the habit, with the landscape, with the people who go past, talk, sincere people understood! It's a quiet place, I like to stay here for tranquility and nature too, that's why I really like the Pantanal (Quequé, 47 years old and 20 years in the Pantanal)

Besides affirming the pleasure and satisfaction provided by the act of inhabiting a place with landscapes loaded with physical-natural elements: "I like everything here, it's cool ... well ... the bird song" (Dona Janice C., 42 years old and 15 years in the Pantanal)

My life is this here. I really like living here in Nhecolandia. My life is this one here. For me it's a wonder that you get up here and see a landscape like this here. See other air ... Here it dawns and darkens with the same landscape. Tranquility with no one to mess with you just worry about your work and nothing else right (Armando S., 61 years old and 23 years in the Pantanal)

The importance of harmonious living among residents of the same farm, as well as with farms in the neighborhood was also noted:

I like everything here: you can live here, because the thing here is different from the city, the movement, the day to day also, right. In the city I stay four days, five days. I don't like the city at all. Here we know everything from the other farm, we even know all the neighbors. They come here, we go there. If you do not know them, it's the same thing, it's the same thing as if you were here, it's the way it is, it's the farm system ... (Vandir F., 54 years old and 29 years in the Pantanal)

With regard to the negative points presented by some interviewees, the difficulties of transportation and the distance from the large urban centers (Figures 2) that have the important resources that do not exist in the Pantanal were the most emphasized, especially when asked: "... it's difficult just to go to the city, it's far, the road is bad, right. If it was a good road! We still have the Toyota, on the other farm, it's a horse or a tractor, right? There are farms that go to the city once a year. But each one has his experience, right. " (Armando S., 61 years old and 23 years in the Pantanal)

Plus it is very far from town. It's bad for people to go and get back again. It takes four hours to travel to Corumba. In the flood you have to go by tractor until the firm farm, then you go by Toyota or catch a boat ... ah! That's a lot more than four hours it's about six. (Dona Janice C., 42 years old and 15 years in the Pantanal)



FIGURE 2

- a) Image of the Estrada do Aterro: the main access route to the curva do Leque (Photo: Mauro Silva - May / 2012); b) Tractor transport during the flood season (Photo: Luciano C. - Jan / 20041); c) Pantaneiros returning from the city to the Farms.

Source: Mauro Silva - May / 2012

Perception on the Regional Natural Dynamics of the Nhecolândia Pantanal

Pantaneiros reported their senses of the processes involving regional water dynamics and its influence on the formation and transformation of the Landscape units that make up the Pantanal of Nhecolândia: "The characteristic of the Pantanal is sand, if there isn't any sand it's not the Pantanal. Two things that you need in the Pantanal: sand and water, right? If water comes sand comes." (Armando S., 61 years old and 23 years in the Pantanal)

This interviewee's perception concurs with the statements of Cunha (1980) who emphasizes that the Pantanal of Nhecolândia is one of the subregions identified in the Pantanal and constitutes an area of 23,574 km² filled with fine sandy sediments deposited by the Taquari river in the Quaternary period

At another point, the interviewees draw attention to the changes in the landscape due to changes in flood and drought dynamics in the region:

... this year there was no flood. Change in the weather, right? [...] In the old days, when I first got to know the Pantanal, there were ten years of drought and ten years of flood, right. Now everything has changed. Now it's been more than ten years. When I got here on this farm in 82, 83, it was all water here. It was dry in 87, in 88 it was very high, all the bay was water, not now, every year it's dry. (Vandir F., 54 years old and 29 years in the Pantanal).

There is also an emphasis on periods of high spikes in flooding, especially when it is stated that: "The floods have changed a lot. In 76, 78 there were those big floods here, it flooded a lot around, it lasted a long time, right? It used to be a flood above the flood, not now, it has already differentiated many things" (Luis C., 33 years old and 25 years in the Pantanal)

The observations affirmed by these pantaneiros can be scientifically confirmed with data presented on the rainfall in the Upper Paraguay Basin and the interannual fluctuations in the twentieth century:

Two long temporal segments tending to rainfall are distinguished in the BAP: (a) from the beginning of the century until the first half of the 1930s and (b) from the second half of the 1970s until at least 1997. They are characterized by the higher frequency of average years and tending to rainfall and of extreme high maximum levels in the Paraguay River in Ladário

and by the lower frequency of very dry years and maximum extreme low levels in the Paraguay River in Ladário. (SALVI-SAKAMOTO, 2004, p.19)

Another type of change observed refers to the invasive shrub vegetation (Figure 3), which according to the statements is mainly occupying areas of bays and fields with greater frequency and intensity in recent years, according to them, due to prolonged droughts in the last decade. “The scenery changed, changed a lot, changed a lot. [...] You could walk for miles and miles without seeing a bush, only countryside and the bay. This bay here in the old days you couldn’t see all this stuff that there is now. Look at it now! ... they are all like this [...] the drought brings a lot of dirt.” (Armando S., 61 years old and 23 years in the Pantanal).



FIGURE 3
Invasive shrub vegetation that expands through the Campos areas.
(Photo.: Mauro Silva - May/2012).

For Pott (2007), in the Pantanal region, even within a homogeneous formation, in principle, there are great variations in the floristic composition, due to subtle differences in the height of the water depth or depth of the water table, the permanence of the flood, standing or flowing water, river or rainfall origin, or simply the distance from the body of water. Thus, the response of the plants to the different disturbances depends on the morphological adaptations of the plants to fire, grazing and water shortage, concluding that the intensity and frequency of these disturbances can cause modifications in the ecosystem, as well as produce favorable environments for the dissemination of undesirable plants, considered invasive.

Intimate Relationship of the Interviewee with the Nhecolândia Pantanal Landscape

When they were encouraged to express their feelings about the daily, intimate landscape, peculiarities of the relationship between pantaneiro and the Pantanal landscape units were revealed, such as “This image of the farm’s bay (Figure 4), this is going to be a memory always, right. It was more beautiful but the vegetation came and ended it, it’s dry, it got dry and so the vegetation came, right?”. (Vandir F., 54 years old and 29 years in the Pantanal)

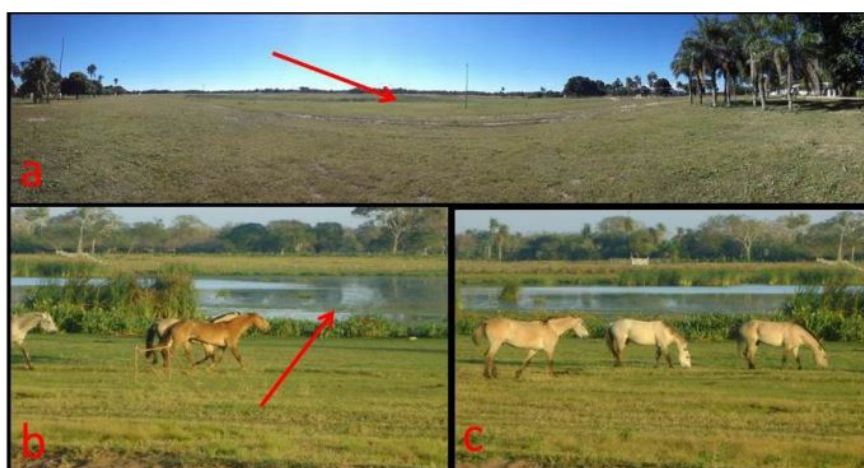


FIGURE 4

Bay cited by Seu Armindo and Seu Vandir. a) with little water and large amount of grass and invasive vegetation in August 2012 (Photo: Mauro Silva); b) full in May 2009

Photo: Suzane Lima

It was verified at this moment of the interviews that the bays are always present in the imaginary of the Pantaneiro, as identifying elements of the landscape of the place: “Ah! Pretty is an image on the edge of a bay, in the bay you see the alligator, you see the capybara, the animals are all there loose, and you catch a lot of piranha (laughs)” (Quequé, 47 years old and 20 years in the Pantanal).

Some emphasized how much such unity is part of their daily life over the time they have lived in the Pantanal: “Here in the Pantanal, I like the bay above where I used to live. Big bay full of birds, animals”. (Figure 5. (Augusto S., 47 years old and 21 years in the Pantanal)

In addition to the Bays, the interviewees also showed an affinity with other components of the Pantanal landscape, such as the ebbs, nevertheless accentuating the dynamics of their evolution: “I think the ebb is pretty. It filled up from time to time, so it was full of water, it disappeared from sight. Not now, you see only grass, that Burro’s Tail that the people talk about, a long weed” (Figure 6) (Luis C., 33 years old and 25 years in the Pantanal)

... it’s the carandá, that bramble there (Figure 7). There’s a lot, it’s really pretty. And why is there too much here? Because of the salina, it likes the salina very much, it really likes the saltpetrous soil, and near the saltmarsh there is a lot and they are lush. As soon as it is away from the salt it flops a bit and does not increase so much ... it likes the salty soil. (Gilson O., 41 years old and 31 years in the Pantanal)



FIGURE 5
a and b) Bays of the Pantanal of Nhecolândia; c, d, e) Large bay evidenced specifically by the interviewee Augusto S.



FIGURE 6
a) Carandás near a Salina, b) Carandás dispersed in the Field,
c) View of ebb occupied by vegetation cited by pantaneiro Luis
Photos: Mauro Silva, 2012

Knowledge on the Lacustrine Systems of the Pantanal

Asked specifically about the lacustrine systems of the Pantanal of Nhecolândia, all the interviewees showed a very empirical knowledge of the typological differences between the lagoons:

There are more bays here. Those where the water is sweet. Now there are some that are saline, their water is saltier, only cattle and the animals drink water from there, if they are good and deep not in a drought, now there are some that dry on the spot, not a little plant grows because of the salt. (Luis C., 33 years old and 25 years in the Pantanal)

The observed changes in the dynamics and behavior of these systems in the last decades were also reported: “The lagoons are different now: it has the bay and the salinas. The salina doesn’t have any plant or animal. The salinas this year, almost everything is dry, they take longer than the bays [...]. Except that in the past these salinas were almost never dry” (Augusto S., 47 years old and 21 years in the Pantanal)

The lagoons are all different, there are bays that dry out, there are bays that don’t have any good water, and the water is brackish, what they call salina. And there is a bay that comes close to it is this world of rainfall but in the dry season it gets overgrown. The saltmarsh is harder they don’t all dry, there are some that have a little water, but don’t dry completely, and this is good for cattle rearing. And land that has a saltmarsh, the cattle does not go much in the bay, it goes more in the saltmarsh and even drinks the water, they lick the salty mud (barreiro), on the edges (Figure 9). (Hermínio E., 80 years old and 80 years in the Pantanal)

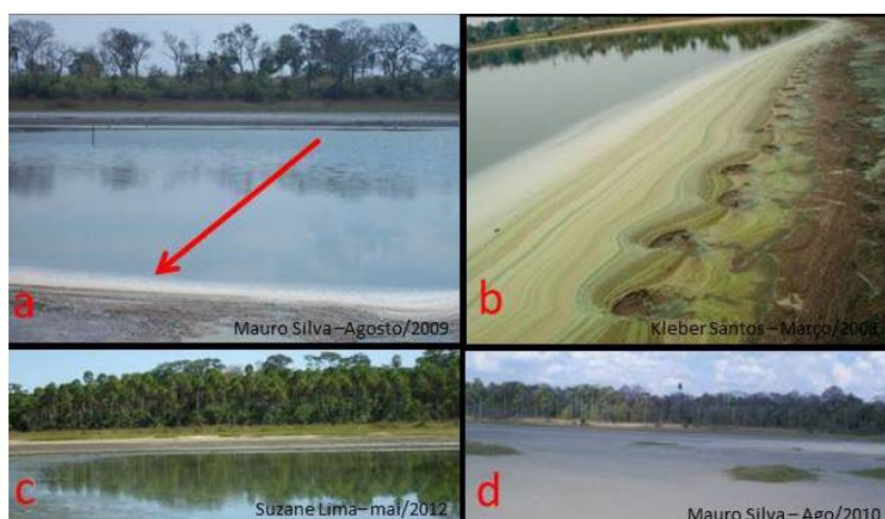


FIGURE 7

a, b) Accumulation of material on the edge of the saltmarsh, referred to by the interviewee Herminio E. as “barreiro”. c, d) Salina Lagoon in different periods

At some points in the interviews it is possible to perceive in the interviewee’s discourse an emphasis on the importance of the hummocks for the existence of the saline lagoons: “If you remove the hummocks the saltmarsh dries out, there has to be a hummock, you have to have a hummock, a hummock of vegetation”. (Luis C., 33 years old and 25 years in the Pantanal)

However, the works Rezende Filho (2006), Silva (2007) and Santos (2008), are open to a differentiated landscape unit of the Pantanal of Nhecolândia, which was homogenized in former studies of the saline lagoons of the region. It is a lagoon classified locally as “Salitrada Salitreous”).

For Silva (2007), there is an imbalance of the lacustrine systems known as “salinas”, where the predominant factor guiding the dynamics of formation and configuration of the present landscape of saline lagoons was the superficial entrance of acidic water, encouraged by cutting through the hummocks that maintained the system.

Regarding the Salitradas, some of the pantaneiros interviewed present a discourse that classifies the salitrada as a type of Saline lake with a lower concentration of salts in its geochemical components: “There are salitradas with brackish water ... they are full of weeds in the middle, of vegetation, it is not like a salty saltmarsh”. (Gilson O., 41 years old and 31 years in the Pantanal)

In addition, strong emphasis is given to the dynamic observed that the geochemical difference of the water enables the almost annual invasion by grasses when dry, and greater biodiversity when full ‘... the salitrada doesn’t have other animals coming in, fish, alligator, capybara ... The people call it salitrada because the water it is not sweet, and also it is not as salty as the saline lagoons” (Augusto S., 47 years old and 21 years in the Pantanal)

The salitrada is almost a saltmarsh, when it has enough water it is different, there is a type of vegetation that does not occur in the salina, more animals get in (Figure 8), now when it starts to dry it gets thick, saltier. I think the name salitrada, as the old pantaneiros said, passing from one to the other, here we don’t say lagoon, only salina, bay and salitrada. (Quequé, 61 years old and 20 years in the Pantanal)



FIGURE 8

a, b) Salitrada with animals and macrophyte vegetation rarely found in salinas - photo: Mauro Silva, May / 2012. c) Salitrada Lagoon Dora Field used as a refuge for intake of water in dry season- photo: M.Silva, Aug/2009.

Interviewee's Expectations and Projects in relation to the Pantanal of Nhecolândia Landscape

The interviews showed that the prospects of a better quality of life for the Pantaneiros reveal a personal conflict between the eagerness for the benefits of modernity: “I think the Pantanal, to be the Pantanal it has to be the way it is, you do not need to bring it benefits. It has to be a sacrifice. If you bring asphalt here, it won’t be the Pantanal” (Armando S., 61 years old and 23 years in the Pantanal); and the fear that this modernity brings with it abrupt changes, some already perceived, in the characteristics that give the Pantanal of Nhecolândia its own landscapes and identities:

The Pantanal, as the other says: progress will come, right? Just as now the electricity is coming, the people are making the road right, so on top of that they are also degrading the Pantanal. Why? Like over there, they are making the power network, they have to deforest. They already knocked it down there. (Figure 9) (Quequé, 47 years old and 20 years in the Pantanal)



FIGURE 9

Deforested area for installation of the power grid in the Pantanal of Nhecolândia (Photos: M. Silva - 2012)

The same pantaneiro concludes: “It’s not that we don’t want progress in the Pantanal, it’s that progress has to know how to come there, because if it’s just the way it’s coming now, it will destroy everything you’re seeing here.” (Quequé, 47 years old and 20 years in the Pantanal)

The Beginning of new conflicts

Salis and Crispim (1999) report that the new ranchers, ignoring the cultural and environmental value of the Pantanal, impose strategies to increase production, which cause changes in the environment, generating possible impacts of negative consequences in the long term: “The major transformation that occurred was deforestation [...]. Pasture is one of the things that grew most in the Pantanal. The new people there are putting pasture everywhere”. (Quequé, 61 years old and 20 years in the Pantanal)

According to the authors, the pressure of deforestation to establish pastures has mainly affected the arboreal vegetation of the Pantanal.

New landowning individuals in the Pantanal are attributed a character of ideological change in favor of economic development based on the introduction of technological innovations and structural improvements that facilitate the production process independent of the limitations imposed by the natural dynamics of the Pantanal. In our view, these are “alien” individuals to the area with a motto summed up by accumulation at any cost, regarding the physical-natural aspects of the Pantanal of Nhecolândia’s landscape.

... they are deforesting, right? There’s already a load of newcomers from Sao Paulo, Campo Grande here, and they’re deforesting, right. The farmers of yesteryear did not even like to set fires, they did burn, but no one liked to cut down the vegetation. Today, burning is forbidden, but they are deforesting for rearing cattle. Cutting, knocking down, changing the Pantanal, drying everything, where you cut down it all dries up. (Hermínio E., 80 years old and 80 years in the Pantanal)

According to Espindola (2010), the Homen pantaneiro is understood to be the worker who lives isolated on the cattle ranches, a descendant of ethnic mixing, and who almost has a partnership, a “cumpadrio”, with the owner, that is only observed in the work relationships, a long way from an equitable income or social division.

It is noteworthy that this old relationship of proximity between Peon and farm owner in the Pantanal of Nhecolândia was also observed during the interviews:

We lived on the other farm there and the old owner passed away and the new ones were the children, and they are very in our favor, until today. This is ours, it was all theirs and their father gave it to us. Because the old bosses, when they had old workers, the bosses always helped, with a piece of land, cattle. So as my father was an old worker they gave this piece to him, it was winter pasture where he put the cattle to produce, right, in the end he gave it to my father (Hermínio E., 80 years old and 80 years in the Pantanal)

Nowadays a different reality is perceived: the Pantaneiro Peon has begun to evaluate the transformations, mainly negative, of the landscape of the Pantanal, and to attribute responsibility to those previously perceived as holders of knowledge and power: “There is a place that they cleared, they deforested to plant pasture” (Hermínio E., 80 years old and 80 years in the Pantanal)

The coexistence of the Bosses and the Employees has to improve, better wages, more quality of life, health. There are farmhands raising children and they are working for his boss, without schooling, that is what they want, because if a guy doesn't know anything, he will not complain much, he can't read, he doesn't know anything [...] and for nature I think this deforestation has to end this business, it has to end, right. Vandir (54 years old and 29 in the Pantanal)

FINAL CONSIDERATIONS

The reflections from the discourse analysis of pantaneiros living in the Pantanal of Nhecolândia for more than twenty years revealed that these agents perceive the fragility of the system and its vulnerability to the interferences resulting from the historical process of use and occupation of the region, particularly the intensification of this process in the last decades.

The interviews also revealed a concern on the part of the pantaneiros over the increase of deforestation and the replacement of the vegetation cover by introduced pastures, a process that materializes the farmers' strategies, especially the new ones and is directly influencing a dynamic of reorganization of the elements that constitute the landscapes of the Pantanal of Nhecolândia, transforming them, as in the case of the capos and bays occupied by invading plants.

The results concerning the cultural relationships detected within the Nhecolândia Pantanal showed that the rural workers who have lived in the region for more than 20 years - the Pantaneiros - demonstrated a closeness, awareness and intimate relationship in the face of the environmental importance of the area and the landscape elements.

Therefore, the need to discuss projects aimed at raising awareness is emphasized, especially of the owners of the farms, who raise cattle, often causing deforestation, which emerges as a fundamental problem of the Pantanal of Nhecolândia, in order to reduce impacts and reduce environmental risks, and mainly contributing to the barring the cultural conflict that links the relationship between pantaneiros and the new landowners in the Pantanal of Nhecolândia, a conflict that is very evident in the answers to semi-directed questions.

However, we do not want to make a romantic and anti-developmental discourse here, but the research results show the need for caution, through planning, implementation and enforcement of existing legislation, as well as the elaboration of new legislation based on the limitations imposed by the physical-natural and, above all, cultural characteristics manifested in the Pantanal of Nhecolândia, in order to assure a healthy economic development both for the individuals belonging to the landscapes that constitute the territory and for the nature that visually draws such landscapes.

ACKNOWLEDGEMENT

We are grateful to CAPES and FUNDECT / MS for supporting this research.

REFERENCES

- CUNHA, N.G. Considerações sobre os solos da sub-região da Nhecolândia, Pantanal Mato-Grossense. Corumbá, EMBRAPA-EUPAE de Corumbá, 1980. (Circular técnico, 1).
- ESPINDOLA, D. J. O Peão Pantaneiro (seu meio, suas lidas, suas crenças: sua historia). Revista Universo. Nº 01 – XII Jornada Científica - Campus de Niteroi, 2010. In: <http://revista.universo.edu.br/index.php/1reta2/article/viewFile/272/164>. Acessado em 16/09/2011.
- FERNANDES, E., Caracterização dos Elementos do meio Físico e da Dinâmica da Nhecolândia, (Pantanal Sul-Mato-grossense). Universidade de São Paulo, Dissertação de mestrado, São Paulo, 2000.

- MOURÃO, G. M. Liminologia comparativa de três lagoas (duas “baías e uma “salina”) do Pantanal da Nhecolândia, MS. São Carlos: UFSCAR, 1989. 135p.
- PASSOS, M.M. A Raia Divisória: geossistema, paisagem e eco-história. Maringá: Eduem, 2006.
- POTT, Arnildo. Dinâmica da Vegetação do Pantanal. In: Anais do Segundo Congresso de ecologia do Brasil. Caxambú-MG, 2007
- PROENÇA, A. C. Pantanal – Gente, Tradição e História. Ed. do autor. Campo Grande, MS: 1997.
- QUEIROZ NETO, J.P.; LUCATI, H. M., SAKAMOTO, A. Y. Granulometria dos solos Arenosos da lagoa do Meio (Fazenda Nhumirim, Embrapa Pantanal). In: SIMPÓSIO SOBRE RECURSOS NATURAIS E SÓCIO-ECONÔMICOS DO PANTANAL, MANEJO E CONSERVAÇÃO, 3. 2000, Corumbá, MS.. Anais...Corumbá, MS. EMBRAPA-CPAP/UFMS, 2000.
- RADAMBRASIL, Ministério das Minas e Energia. Secretaria Geral. Folha SE. 21 Corumbá e parte da Folha SE. 20, Geologia, Pedologia, Geomorfologia, Vegetação e Uso e Ocupação da Terra. Vol. 27, Rio de Janeiro, 1982.
- REZENDE FILHO, A. T. Estudo da Variabilidade e Espacialização das Unidades da Paisagem: banhado (baía/vazande), lagoa salina e lagoa salitrada no Pantanal da Nhecolândia, MS. Dissertação (Mestrado), UFMS/CPAQ, Aquidauana, 2006.
- RISSO, Luciene C. Paisagens e cultura: uma reflexão teórica a partir do estudo de uma comunidade indígena amazônica. Espaço e Cultura. Rio de Janeiro: UERJ, janeiro/junho de 2008.
- SAKAMOTO, A.Y..“Dinâmica Hídrica em uma Lagoa “Salina” e seu Entorno no Pantanal da Nhecolândia: Contribuição ao Estudo das Relações Entre o Meio Físico e a Ocupação, Fazenda São Miguel do Firme, MS”. (Tese de doutoramento) Faculdade de Filosofia, Letras e Ciências Humanas/USP São Paulo, 1997.
- SALIS, S. M., CRISPIM, S. M. Fitossociologia de quatro fitofisionomias arbóreas no Pantanal da Nhecolândia, Corumbá, MS. In: CONGRESSO NACIONAL DE BOTANICA, 50. 1999. Blumenau. Programa e resumos... Blumenau: Sociedade Botânica do Brasil, 1999.
- SALVI-SAKAMOTO, Luiza Luciana. A chuva na Bacia do Alto Paraguai: aspectos das flutuações interanuais durante o século XX. In. Anais... IV Simpósio do Pantanal: Sustentabilidade regional. EMBRAPA/Pantanal: Corumbá, 2004.
- SANTOS, K. R. S. Biodiversidade de Algas e Cianobactérias de Três Lagoas (“Salina”, “Salitrada” e “Baía”) do Pantanal da Nhecolândia, MS, Brasil. Dissertação (Mestrado). Instituto de Botânica da Secretaria de Estado do Meio Ambiente: São Paulo, 2008.
- SILVA, M. H. S. Subsídios para a Compreensão dos Processos Pedogenéticos da Lagoa Salitrada: Pantanal da Nhecolândia, MS. Dissertação (Mestrado), UFMS/CPAQ: Aquidauana, 2007.
- SOARES, A. P.; SOARES, P. C.; ASSINE, M.L. Areais e Lagoas do Pantanal, Brasil: herança paleoclimática?. Revista Brasileira de Geociências. Volume 33, 2003. p. 211 – 224.
- SOUZA, Reginaldo José de. O Sistema GTP (Geossistema – Território – Paisagem) aplicado ao estudo sobre as dinâmicas sócio-ambientais em Mirante do Paranapanema – SP. Dissertação (Mestrado) – Univ. Estadual Paulista, Faculdade de Ciência e Tecnologia. Presidente Prudente, 2010.
- VIEIRA, R.A. O Homem Pantaneiro – Características e Cultura. In: SIMPÓSIO SOBRE RECURSOS NATURAIS E SÓCIO-ECONÔMICOS DO PANTANAL, SUSTENTABILIDADE REGIONAL, 4. 2004, Corumbá, MS.. Anais...Corumbá, MS. EMBRAPA PANTANAL, 2004.
- VITTE, Antônio Carlos. A Geografia Física no Brasil: um panorama quantitativo a partir de periódicos nacionais (1928 – 2006). Revista da ANPEGE, v. 4, p. 47 – 60, 2007.

NOTES

- 1 Source: <http://viajeaqui.abril.com.br/national-geographic/blog/luciano-candisani/page/2>