



Social issues in amazon waters: senses, perceptions and representations

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ABSTRACT. With the main objective of observing as the senses are constituted in Amazonian communities, the perception of the subjects and their social representations about the importance, the use and preservation of water to know the logic of these communities, social and problematic phenomena that surround it, a qualitative research was conducted under the theoretical framework of the Cultural Geography. The spatial area of this study consists of six (06) communities inserted in two cities of the State of Rondônia: *Porto Velho* and *Guajará-Mirim*. With the help of Human Geography in its phenomenological perspective, whose interface permeated the Sociocultural Geography, it was observed that Amazonian communities exposed intimate senses in relation to waters that constitute their identities and, through these senses, identified the connections between social phenomena and problems surrounding their water, their world lived.

Keywords: communities, riverine people, community logic.

Questões sociais nas águas amazônicas: sentidos, percepções e representações

RESUMO. Com o objetivo principal de conhecer como se constituem os sentidos em comunidades amazônicas, as percepções dos sujeitos e suas representações sociais sobre a importância, o uso e a preservação da água para, assim também, conhecer as lógicas dessas comunidades, fenômenos sociais e problemáticas que as circundam fez-se uma pesquisa qualitativa, sob o quadro teórico da abordagem da Geografia Cultural. O recorte espacial deste estudo são 06 (seis) comunidades inseridas em duas cidades do Estado de Rondônia: *Porto Velho* e *Guajará-Mirim*. Na totalidade deste estudo, com o auxílio da Geografia Humana em sua vertente fenomenológica, cuja interface permeou a Geografia Sociocultural, observou-se que as comunidades amazônicas analisadas expuseram sentidos íntimos em relação às águas que constituem suas identidades e, a partir desses sentidos, identificaram as conexões entre os fenômenos sociais e as problemáticas que cercam a sua água, o seu mundo vivido.

Palavras-chave: comunidades, ribeirinhos, lógica de comunidade.

Introduction

The Amazon (or Pan-Amazon) is the region that includes the largest and most extensive continental river basin surface drainage on the planet, occupying a total area of 7,008,370 km², from the headwaters in the Peruvian Andes to its mouth in the Atlantic Ocean (PNRH, 2010). Its extension in Brazil (Brazilian Amazon or Legal Amazon) represents 61% of the entire national territory, i.e. more than five (05) million square kilometers (5,217,423 km²), covering 10 states (*Acre, Amapá, Amazonas*, part of *Mato Grosso, Pará, Rondônia, Roraima, Tocantins*, part of *Maranhão* and part of *Goiás*). An extensive and rich region, with several communities that undergo transformations with the rapid deforestation of their areas, implementation of public and private projects and contamination of waters (Dias & Aragon, 1987; Aragon, 2006).

The intense cultural transformation that such changes cause to these communities, with the construction of new meanings and changing their natural and cultural landscapes and the importance of water, not only for these communities, but to all humanity, justified this research.

Concern about water on the national scene is not recent. In 1992, during Rio 92, commitments were made, with few results. In 1997, as a result of the seminar *The evolution of the brazilian large water resources* and the *Brazilian sweet waters* workshop, the document *The sweet waters of Brazil* was created, including one of its main items *the Integrated planning and management* (Rebouças, 2002). From this, water management and its future are discussed in congresses, meetings and symposia, but it has been found that there is a lack of work that seeks to know how the senses that lead to social perceptions and

representations of communities in Amazonian spaces on the subject of water, there are no studies that are directed to future management projects with respect to the senses, perceptions and social representations of these communities, or their logics.

In this study, in order to know how the culturally constructed senses are in the Amazonian communities, as well as the perceptions and social representations of individuals about the importance, the use and preservation of water and also to know the logic of these communities on this issue, this study was conducted with the certainty that cultural landscape found in each community responds to the senses, perceptions and own social representations, that is, are just tiny and important parts that make up the immense and diverse Amazonian cultural landscape.

In walking this research community was understood as Weber (1987) defines, i.e., a group whose social relationship is based on a sense of solidarity: the result of emotional or traditional links of participants (Weber, 1987).

It is favored here geographical landscape impregnated of senses and values, capable of observation, described and represented by explicit language in diverse icons. Understanding the landscape as the expression captured by these elements. An image that allows for interaction between the senses and the interpretation of the viewer, trying to understand, criticize and recreate what is observed. "The landscape is a set, a convergence, a vivid moment. An internal connection, an impression, which unites all elements" (Dardel, 2011, p. 30).

Moreover, the landscapes in this study were taken from the daily lives and are full of cultural senses and meanings. With the data provided by the field research, we tried to decode these landscapes, because geography is everywhere, reproduced daily by the subject member of this cultural landscape. The recovery of these senses and meanings in common landscapes says a lot about these cultural subjects and can provide a truly human and relevant geography, which can contribute to the very core of a humanistic education: better knowledge and understanding of ourselves, others and the world I share (Cosgrove, 1999).

As Amazonian space, in the context of this study, six Amazonian communities were chosen in two distinct cities: in the city of *Porto Velho*, capital of the State of *Rondônia* and in *Guajará-Mirim*, the second city founded in that State. A state that, due to its diversity, its sociocultural problems and its rapid demographic growth, is a synthesis of the Amazon region.

The communities of *Porto Velho* brought to this study diversified data because they are inserted in an open and receptive city to diverse peoples, a capital surrounded by cultural actions of differentiated groups, producer of identities and particular heterogeneities that dynamizes specific social ways of life. For that reason, these communities present themselves as spaces that exhibit processes of (re) construction of their territories of multiple and diverse landscapes where the population builds their identity and their feelings.

With differentiated actors who take ownership of this space and territorialize it, deterritorialize and/or multiterritorialize it, the communities of *Porto Velho* offered to the research a spatiality of different objects or beings, which allowed the analysis of different comparisons or confrontations. The *Porto Velho* communities analyzed in this study were: *Agrovia*, *São Sebastião*, *Maravilha* and *Niterói* (left bank of the Madeira River - rural area) and the *Triângulo* neighborhood community (right bank of the Madeira River - urban area). The preference for these communities was because they have cultural landscapes that, although there is a constant flow of knowledge with the urban, insist and remain in the experience of life with senses and meanings built, specialized or revalued along the rivers.

The community investigated in *Guajará-Mirim* allowed a particular analysis, because it is a closed community, that does not accept abrupt changes or the permanence of factors foreign to its culture, nor interferences in its way of life. A frontier community with diverse actors that occupy and territorialize spaces and, although they have the opportunity to interact in their daily lives with multiple cultures, building and specializing senses that lead them to diverse social perceptions and representations, opt for the singularity of riverside life.

The *Guajaramirense* community chosen for this analysis is formed by fishermen of the *Triângulo Quarter*, a community that models its identity in the experience with the river and, by their life histories in the proximity to the waters, they constructed their personalities, their way of seeing, of thinking and of feeling the world. Human beings who, in continuous exchanges with the urban landscape, prefer to integrate the rural landscape.

The Amazonian human being observed in this study, is one that, although a few minutes from the center of the investigated cities, chose to live on the banks of rivers. Communities that are part of a landscape seen and admired by many, but transformed and lived by this man. A being who gives a different characterization to his world, a

conception of nature that is part of the urban and rural in their way of life with two essential elements of its landscape: the water and the woods. Importantly, when looking for the meaning of the Amazonian human being, it was understood that this man/woman is not only born at the place, but also a human being who has chosen to live and dream in the natural landscape, modifying it and building landscape cultural observed, a being who has appropriated the space as their place.

Communities analyzed enabled to view forms landscape, colors, smells, sounds, and movements linked to water. A landscape printing and receives the marks of this water, shaping their culture in a dynamic and reciprocal relationship. Cultural landscapes that present conflicts and tensions brought with rampant occupation and various projects of exploitations, with ownership, and territorial dispossession spaces.

By naming this study *Social issues in amazon waters: senses, perceptions and representations*, it was not intended to show the senses of all the Amazonian communities that exist there, because, composed of disparate senses, the Amazon presents different cultural landscapes that see and feel the water in different ways. Therefore, in this study, under the theoretical framework of the Cultural Geography approach, in its phenomenological aspect, with interface to Sociocultural Geography, we sought to reach the objective proposed with this consciousness.

For this study, which aimed to know the way Amazonian men/women, we sought the understanding of this sense in geographic look and how this culturally constructed sense leads to different perceptions, worldviews and construction of views on Frege (1978) and its design unit of meaning.

During the walk, there was a study by qualitative appropriation, corresponding to the use of instruments that were relevant: the unstructured interview, with the support of mental maps, which constituted the basis for the identification of sense phenomena and meanings Amazon this relationship of the subject with water (Kozel, 2007; Meihy, 2005; Strauss & Corbin, 1998).

In conducting the interviews, we used the Grounded Theory method, considering that the reality can be socially constructed from the interaction between individuals legitimized by signals (symbols or signs). Primary fact for observation and analysis of the data collected in this study, because this is one interpretive method of research that seeks to understand reality from the senses and meanings attributed by those involved to

their experiences (Strauss & Corbin, 1998).

As a result of these unstructured interviews, thirty - one (31) narratives were digitally recorded: twenty - five (25) in the Puerto Rican communities observed (*Triângulo* - six (06), *Agrovila* - three (03), *São Sebastião* - five), *Maravilha* - three (03) and *Niterói* - eight (08), between October and November 2013. And six (06) at the Fishermen's Colony in the *Triângulo* Quarter of *Guajará-Mirim*, in January 2014. As we opted for a qualitative research, the number of interviewees was random, obeying the criteria observed in the research project.

For the analysis of the narratives obtained by interviews, we used the qualitative research software ATLAS/it, which aims to facilitate this analysis when there are large volumes of textual data. This software was developed by Scientific Software Development, mainly aimed at the construction of theories and allows the necessary audit by readers to verify the validity and reliability of results. Such an audit is provided by the analysis of the reports generated by the ATLAS/it. The narratives of employees, recorded and transcribed, were transferred to the ATLAS/it, as unique documents, separately, providing significant codes used to map the points that are important to achieving the objective.

A revealing look at the narrative with the help of Atlas/it software

Paul Claval (2004), in his conference *Do olhar do geógrafo a geografia como estudo do olhar dos outros*, states that "[...] the geographic practice has never been as simple as the analysis look Geographer could let believe". In line with this thought, it was also for new methodologies to provide to this study analyses unravel what geographic look sought to clarify and opted for unstructured interviews and by the Grounded Theory method in conducting the same.

In the pursuit of reading and understanding of the other, their interpretation of reality and new information, the narrative of the collaborators is obtained after treatment of each of these oral narratives, subjected to an exploratory reading in search of the essence of being human Amazon and the relationship with water.

Therefore, after exploratory reading of the interviews, in order to identify the key concepts of the research (Box 1), we looked for:

- The role of water in the configuration of the subject and the social fabric of communities;
- Connections between social phenomena and problems surrounding water;
- Notion of preservation - the communities on the use of water.

Box 1. Identification of the key concepts of the research.

ROLE OF WATER	CONNECTION BETWEEN SOCIAL PHENOMENON AND WATER	CONCEPT OF PRESERVATION
What is the privileged space of water in the life of these communities?	What characteristics usually involve the logic of the Amazonian communities with respect to the social and problematic phenomena in their waters?	What factors influence the thinking of communities investigated on the use and preservation of water?
What role does water play in the configuration of the subjects and in the social fabric of these communities?		What are the connections between the senses, the perceptions and the social representations of the Amazonian communities regarding water care?

Source: The author.

This phase consisted of an initial analysis of the material by screening in order to better understand it and thereby initiate the identification of the basic unit of analysis, i.e. culturally constructed senses indicators concepts to provide ways for the development of categories to be arranged in the ATLAS/it software.

After this pre-analysis, we created the hermeneutic unit in the software ATLAS/it, which allowed the discovery of complex phenomena, which possibly would not be detectable in the simple reading of the text, particularly in relation to the traditional technique of processing data manually, using pencil, scissors and glue. This is because, with the help of technology, it was possible to integrate the hermeneutic units (primary projects) to each other.

To this end, the text files (the narratives obtained from the interviews in the investigated communities) were included in the program. After this insertion, each interview has become a primary document (primary document). Primary documents were arranged according to each community of interest for later comparison possible. Therefore the documents were divided into families - five communities inserted in *Porto Velho* (twenty-five interviews) and a community inserted in *Guajará-Mirim* (six interviews).

After the organization of documents in hermeneutics unit, the next step was to encode them, i.e., sort the text according to categories and cut the text codes. The application of codes was directed in view of the objectives of the research, interpretation and summarization of data.

The coding began with reading the text in search of salient information (quotes), observing what was proposed in the pre-analysis, and the application of codes to text, i.e. the labeling of the relevant bodies of each document (development categories). In the application of the codes, sum up the constant comparison of excerpts encoded with the same code.

Therefore, created codes were applied to new instances, in order to search for patterns and variations in the narratives of the informants to bring to light their culturally constructed meanings.

Subsequent to initial application of codes to documents, we sought to refine coding, creating or deleting codes, aiming at saturation coding, i.e. a classification of text quotes that meets the most of the research objectives, extracting all possible information. After refining the coding, created codes were grouped in families, which means the grouping of codes that lead to the understanding of the same issue. Then, there was the categorization of primary documents.

After categorizing all interviews (primary documents), we generated output codes and quotes. Outputs are automatically generated reports by ATLAS/ti, always relevant, as they provide the research an overview of the categorization which was held, allowing there reading all the quotes sorted by code. These reports formed the majority of the qualitative analysis of the documents, so they are useful for the interpretation of data and the formulation of research inferences.

ATLAS/it also allowed the statistical treatment of the codes entered in the documents. One of the output options on the menu codes generation matrix in Excel, in which are disposed all primary documents and codes count (per document) inserted. From this tool, it was possible to have a quantitative survey of codes through the development of graphics, which also contributes to the formulation of inferences and especially for comparative analysis between the senses and perceptions provided by the employees of the various Porto Velho communities and Guajará-Mirim community.

Next, we used ATLAS tool/called Query Tool. This tool has provided the text search to search. Unlike a search plain text by word count, this tool allowed the search for citations marked by this researcher in all primary documents and the identification of relationships between the codes (from different families) and quotes.

After separate analysis of each community, ATLAS/it provided to research networks formed with all of the data obtained in Porto Velho communities.

In addition, after the delivery of data to research the construction of these graphic networks, aided by the ATLAS/it software, we analyzed the data tables with the similarities and differences of meanings, perceptions and views on different *Porto Velho* communities, as explained in the Table 1.

The following is exposed, in Table 2, the results obtained in the comparison between the community of *Guajará-Mirim* and *Porto Velho* communities:

Table 1. Similarities and differences between Porto Velho communities.

	Agrovila (3)*	BairroTriângulo (6)*	Maravilha (3)*	Niterói (8)*	São Sebastião (5)*
Family 1	Fishing (1) and	Fishing and	Childhood (1)	Fishing (4) and	Fishing (2) and
Space - Water	childhood (2)	childhood (1)		childhood (1)	childhood (1)
Family 2	General use (2)	Fundamental to life	General use (3)	Subsistence / survival (3)	General use (3)
Role- Water		(4)			
Family 3	-----	Fear / respect (1)	Quiet location (1),	fear / respect (4)	fear / respect (3)
Water Perceptions			dangerous water (1), fear / respect (1)		
Family 4	Pollution (2)	Sewer and economy	Pollution (2)	Pollution (5)	Pollution (4)
Influences on the quality of water		(4)			Sewer (4)
Family 5	Garbage (1)	Garbage (3)	Government Attitude	Pollution (1)	Garbage (2)
Concerns about water			(1)	Garbage (1)	Government attitudes (2)
Family 6	Pollution, fishing,	Flood (3)	-----	Future generations (1)	Future generations (2)
Hydropower plant Impact	disappropriation (2)			Pollution (4)	Fishing (4)
Family 7	Bad Consequences (3)	Bad Consequences	Good Consequences (1)	Fishing (4)	Pollution (3)
Hydropower plant Consequences		(4)		Bad Consequences (4)	Bad Consequences (5)

* Number of respondents. Source: The author.

Table 2. Similarities and differences between Guajará-Mirim and Porto Velho.

	Guajará-Mirim (6)*	Porto Velho (25)*
Family 1	Fishing (5) and Childhood (4)	Fishing (8) and Childhood (6)
Space water		
Family 2	Leisure / entertainment (4)	Use / Livelihood / survival / essential to life (17)
Role Water	Food (4)	
Family 3	Security / quiet (3)	Fear / respect (9)
Water Perceptions		Dangerous (1)
		quiet / quiet location (1)
Family 4	Deforestation (3)	Sewer (8)
Influences on the quality of water	Pollution(3)	Pollution (13)
	Sewer (3)	Economics (4)
Family 5	Siltation (3)	Sewer (7)
Concerns about water	Future generations (3)	Future generations (3)
	Pollution (3)	Pollution (1)
		Attitude of the government (3)
Family 6	Flood (2)	Pollution (9)
hydroelectric impacts	Fishing (2)	Fishing (10)
	Migration to the city (2)	Flood (3)
Family 7	Bad Consequences (3)	Bad Consequences (16)
Hydroelectric Consequences		Good Consequences (1)

* Number of respondents. Source: The author.

The differences and similarities identified in the tables above were accompanied by graphic networks. The analysis with the help of the ATLAS/it privileged context, processes and subjectivity that were involved in these employees, when inserted the data sought by the correct understanding of the senses and meanings in each enunciation.

The narratives obtained, as well as mental maps drawn up in the field, were analyzed as dialogues that allowed the understanding of the way in relation to water perceived and experienced by communities analyzed. In dialogue with these data, in search of these senses, remembered that perception is the result of these senses and occurs subjectively and binds the world lived these employees.

Therefore these senses express important elements to understand this man's emotional link with the place and in which language and communication have important roles. In includes the enunciation scenes, verbal interaction that takes place the construction of senses and production of meanings and it is this interaction

collaborator/researcher that these directions were observed in these Amazonian communities.

Development

From the unit of meaning in Frege (1978), we tried to understand the perceptions and social representations of the water element in the Amazonian communities as a strategy used to unravel the essence of the investigated actors and so unravel its logics.

To this end, there was a raid on the theory of the subject and it is recognized that the relationship of humans with their environment is one of the Geography study object and the Human aspect, specifically the Cultural is that it seeks to understand the meaning that man/woman gives to his/her existence.

With the understanding that the sense is culturally constructed, geography was based on phenomenology and investigated how is the human perception (psychological functions that enable the individual to convert sensory stimuli into experiments, organized and coherent) and representations (processes allow retrieval of objects,

landscapes and people, regardless of the current perception of them) and how they have used these concepts in geography.

Therefore, from the unit of meaning in Frege (1978), we followed by the theory of Tuan (2012) in his studies on perception, attitudes and environmental values and the importance of the sense culturally constructed on individual perception. Still in search of understanding the world lived by the analyzed communities, we sought the theoretical basis of Merleau-Ponty (1999) and its consideration of the process of perception and appropriation of the place, taking into account their digressions on perceptions of soul, senses and spatial and chromatic values.

This reflection on the senses and perceptions brought to study a theoretical approach to the questioning of the object under construction. In this dialogue with the phenomenological method of intentionality and intersubjectivity, came closer ties with Edmund Husserl (1996, 2002) and Alfred Schultz (1979) in search of the essence of the phenomenon and the meeting of the subjects in their living world.

This search made possible to know the thoughts, attitudes and values that take different forms, with variations of emotional amplitude and intensity, perceptions that, precisely because they originate in the culturally constructed senses, perceive what these senses allow to perceive and presented themselves to the analysis of the following way:

- Perceptions of water as dangerous: danger as a water-related trait, usually linked to the strength it possesses.
- Perceptions of water as a habitat of beasts: water related to 'beasts', wild animals (alligators, snakes) as well as related to puzzles, myths and legends.
- Perceptions of water as fear / respect: water as something that demands respect, care, zeal. Respect often linked to fear, fear of it.
- Perceptions of water as a safe / calm place: water related to a quiet place, calm, without violence.
- Perceptions of water as safe / calm: water as not dangerous, does not require fear.

This approach to the phenomenological method (intentionality and intersubjectivity) led the research

to the conception of the active, participatory subject, which exhibits its own conception of the world and its relations with daily life. Through the analysis of the narratives, with the aid of Atlas/ti software, the following graph was obtained (Figure 1):

Moreover, the senses of the communities surveyed allow them to realize that there is nothing to worry about regarding the water surrounding them. Such perceptions arise from senses reevaluated by the constant changes in their lives. These changes cause future fears and insecurity in these communities, bringing the sense of crisis (Berger & Luckmann, 2012). As shown by some interviewees in *Porto Velho* communities and *Guajará-Mirim*, when they realize and demonstrate this concern in their narratives. Their perceptions include from the future of next generations to provide water to the disappearance of perennial rivers with siltation and uncontrolled deforestation. These fearful perceptions were exhibited in all narratives and presented as follows:

a. Concern about water from the government's attitude: Government does not demonstrate to worry about the preservation and / or cleaning water.

b. Concern about water from pollution: pollution as a concern of the residents in relation to water (polluted water).

c. Concern about water for future generations: concern because of future generations.

d. Concern about water due to waste disposal: concern about the waste that pollutes the water.

e. Concern about water with the disappearance of rivers: concern about the river siltation.

These senses alone express important elements for the understanding of this affective link of Amazonian man with water, so they are part of their identities and are present in their memories. Memories that are exposed in their narratives whose values have been passed on through language, through communication. The value of this language in the construction of the senses of these subjects in their memories and identities is present in the totality of their narratives, as can be seen in the examples in Box 2.

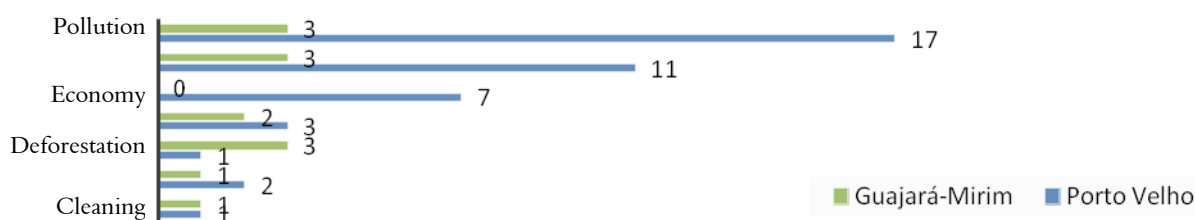


Figure 1. Factors that influence the Amazon water quality in the research subject's view.

Source: The author.

Box 2. The senses in the narratives.

"To drink, to take a shower, everything. She consumed herself, the river water. Of the river and the one of Igarapé. So we always had that respect. Because we used it. Then we had to take care of it." (P16: J. R. - São Sebastião Porto Velho Community).

"The river water I respect a lot. But now, it's kind of hard, right? That, by the congar of the mill ... At first the water was good, right? You took your livelihood from the river, but now ... I do not even know what to say about the value of the water. There are fish for fishermen." (P17: J. M. R. - Barrio Triângulo Porto Velho).

"I've always liked the water. The water of the Madeira River I fear, but the water of the marvelous lake I play in it." (P22: M. F. C. N. -

Source: The author.

Respondents from *Porto Velho* and *Guajará-Mirim* demonstrate they realize the modification of the water and demonstrate, in their narratives, worries about the future of the next generations. Employees of *Guajará-Mirim* care about pollution, silting and with the possibility of the disappearance of rivers. Even with the concern focused also on the future generation, the *Guajaramirense* community does not blame the government or its inefficiency as the lack of enforcement or any other liabilities on those concerns.

Perceptions observed in *Porto Velhenses* communities and *Guajaramirense* community presented in the narrative as follows (Figure 2):

As for the subjects of *Porto Velho* research due to the large immigration caused by the construction of two hydropower plants in the area: *Santo Antonio and Jirau*, with a number of people and companies attracted by these enterprises, show in their perceptions that their habits were threatened and brought them not only the construction of new meanings, but also the sense of crisis provided by the radical changes in the lives of their communities. Thus, their perceptions indicated from the concern with waste, with the siltation of rivers, the pollution of groundwater, but also point to the lack of the government's environmental responsibility.

To study the social representations in the Amazonian communities, assumed that the thought of the residents about the water does not cease to be, as the social representations, a mental reality. At the same time, water is a concrete reality, material and

socially located. According to Peluso (1998), it is at a crossway where an object is both a mental reality as a social and spatial reality that forms the environment for the residents to prepare their social representations.

To unravel the social representations of research collaborators, he tried to capture the look of the residents about their water entering the object of possession codes, the facilities, the difficulties, the experience. An analysis to know the meanings that are their thinking, the same sense that is its symbolic codes formed from their culture and communicated to others by their language, making its subjective representation representative of the other, making it social. The influence of one person over another is especially true for the communication of a thought. According to Frege (1978), someone communicates a thought and causes changes in the normal outside world to induce that other person to learn their thinking and accept it as true (Moscovici, 2011).

The social representation codes are important because they derive from the relationship of the subject with each other and the water surrounding them, show ways of thinking about water and processes that cross, they recognize themselves and other subjects according to various categories of living that water.

The community of logics in this study is understood as the identity expressed by the employees of the same community, seen as a way to bond with other local members for their commitment to this group, expressed by defense rooted values and ideologies in the local culture (Thornton, Ocasio & Lonsbury, 2012).

About these links and the notion of a meaningful life, Widenfeld in the preface of *Modernity work*, Pluralism and sense of crisis - the orientation of modern man, said such ties and notions "[...] are only shared by small communities [...]" and therefore "[...] is important to note how individuals come together in this community" (Berger & Luckmann, 2012, p. 9).

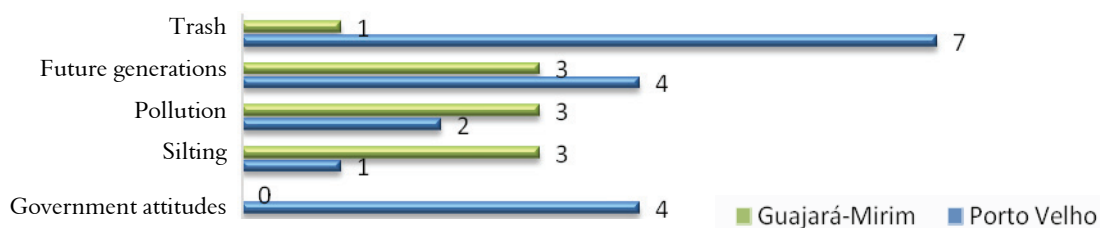


Figure 2. Concerns of research subjects about the future of water.

Source: The author.

Heidrich, Pinós da Costa and Pires (2013, p. 53) corroborates this idea by stating that “[...] a meaningful life is naturally recognizable in small, traditional communities [...]” and also noted that the complexity of modern daily life, “[...] the sense is reworked by institutions and means producers of ideas and messages”.

Moreover, in the communities, we also see that the understandings are renewed, and through exhibition of an idea by another person or group understanding can become present and understandable. “For the composition of the living dialogue is essential. What sets over the social life at the same time it affects is also affected” (Heidrich, Pinós da Costa, & Pires 2013, p. 53).

In the investigated Amazonian communities, understood here as geographically localized communities, their logics is realized as the product of the sum of their senses, their perceptions and their social representations, whose origin is linked to the formed process and forming of life of these communities and it conveys the communication.

In the field work, with the collection and analysis of data, it was possible to observe the values and ideologies of these Amazonian communities, so it was also possible to observe their logics. A community of logics understood throughout the journey of the research, such as the identity expressed by the employees of the same community, seen as a way to bond with other local members for their commitment to this group, manifested by the defense of values and rooted ideologies culture observed.

In the narratives, it was observed how these members organize the rules of the group, their ways of doing things, their ways and customs with senses and values (re)created within the space where they attach new senses and which have a symbolic meaning inside each group. Rules, values and views that are passed on through different modes of communication, constituting collective survival strategies. While the *Portovelhenses* communities live this logic of fear as a logic of lived reality, the community of *Guajará-Mirim*, in many ways, lives of imaginary logic, as shown in Table 3, the analysis of their stories.

Unlike narratives exposed in other Amazonian studies (Sousa, 2012; Silva, 2007), these poetic narratives was absent. Although these employees have in water the place of life, with respect and care that come from created senses and re-created in this larger context of spatiality within a cultural and social bias, it was observed that the relationships that individuals establish with water that gives meaning to their lives are affected by the sense of crisis.

Table 3. Similarities and differences between the Community Logics observed in Guajará-Mirim Communities and Porto Velho

Community Logics	Guajará-Mirim (6)*	Porto Velho (25)*
Logics of Fear (Real Logics)	Flood (2)	Fishing loss (20) Compulsory migration to the city (4) Pollution (21) Flood (3)
Logics of Concern (Imaginary Logics)	Fishing loss (2) Compulsory migration to the city (2) Environmental disasters caused by possible accidents in the hydropower plant (3)	Environmental disasters caused by possible accidents in the hydropower plant (17)

*Number of narratives exposing these senses. Source: The author.

This crisis of meaning found the general conditions for its emergence from the time that the meanings constructed in the culture of each riverside community analyzed, they preserved and passed on from generation to generation (subjective sense), they begin to not coincide with the senses the society in which it is inserted (objective senses).

Thus, the employees of this research, who lived in perfect agreement with the community of life and sense of community, or had concordant senses in the way of living by water, feel and perceive, begin to wonder water and no longer found in the river the signs of the weather over the next few days of sun or rain over the opportunity to good fishing and thus begins also the surprising own senses, beliefs and values, settling the crisis of senses.

From this crisis of senses that leads to a sense of disruption of their lives and their own identities, originate from other behaviors that lead to stress community logic. Thus, to understand this logic, it was also necessary to take a dip in the relations of individuals to understand their cultural universe.

The coexistence of man with the river, especially in portovelhenses communities, causes the stress state in different situations. Tension has several causes, from the construction of two large dams in the waters (Madeira River) with all the changes it is, running through the many details mismatched possible natural disasters (through various media), to the immense and constant reception of immigrants, because they have constructed meanings in different cultures, see the local culture, their meanings and values with prejudices settlers.

Thus, in the narrative, we found the plurality of historical voices that interpret the waters of this part of the Amazon, draw the way of life of communities, and raise fears that evidence found landscape, revealing important traits in the occupation of space. A space mediated by language, by the crisis of meaning, by the multiple interference that make up

the imagination and the history of these Amazonian communities.

These narratives express, therefore, not only the ways of feeling, living, watch and wonder Amazonian riverside area, but also the logic of the surveyed communities. A logic composed of senses, perceptions and social representations that by heterogenic statements, shown in tension and calls for attention to water and solutions, displaying social phenomena and problems surrounding the waters of this part of the Amazon as seen in the Box 3.

Box 3. Logics composed of senses, perceptions and social representations present in enunciations.

"I saw a lot of change here after the plants started to operate. Because the fish are not good. It is time we caught the fish by lowering the river, fish is still alive, but is already rotten" (PD31: T. B. - Community Niterói Porto Velho).

"I lived on fishing and today no one can fish more because the river dug" (PD18: J. R. R. F. - San Sebastian Community Porto Velho).

"We suffer a lot because here is not making money, here you had fishing and they cut all of us. All. And you'll live what? Our life after these enterprises have a big difference" (PD2 M. J. - Community Agrovila Porto Velho).

"This water of the Madeira River, after this plant there, it was very odd. Previously not, but now it's hard for me to drink water from the river. It was very ugly, very ... I do not know, it was weird, the color of the water" (PD9: E. P. - Community Niterói Porto Velho).

"After the plants, there was much modification. Previously there was a lot of fish, now you spend all the week there to kill a fish, two. There is very little. Only on fishery we don't survive no longer have to do something else, grow, raise and fish to survive" (PD11: F.C. B.- Community Niterói Porto Velho).

"In the past, by 2011, we could use this water, the water of the Madeira River was home water, but after the water plant it became contaminated ..." (PD12: F.C. - Triangle neighborhood Porto Velho).

"As for these enterprises, the construction of these plants, had a meeting there, but is that thing, some thought it was good, others thought it was not. In the end, it was built and when finished everyone will go away and the people, who is a fisherman, is then flaked, will have to change profession" (PD13: F. V. M. - Community Niterói Porto Velho).

Source: The author.

With logic formed from the dialectical relationship between the lived space and the designed space, with social awareness of belonging and territorial identities, those communities that maintained close humanized relationship with the components of rivers and forests, are now with unknown, with the search of the place, without the subtlety of incantation or wonderment before found in the water around them.

That logic found express the identity of the employees of these communities and form links between local members, strengthening the commitment of the group. This strengthening was observed in constant meetings in search of defense

rooted values and ideologies in the local culture. This community of logic is responsible for the appreciation of the strong and enduring ties between the members of these communities.

It was observed that although the senses, ideas and views (perceptions and representations) are renewed, modified, transferred and reconstructed by communication, analyzed communities pass on through the crisis of meaning and form logic, from there, filled fears and concerns, with bases on facts and phenomena previously absent in their lived worlds. Such logics lead to new and strange emotional connections to the group, destabilizing them and breaking paradigms before existing.

Final considerations

In this study, under the categories of geography and under the gaze of the geographer who does not deny the role of the social, political and economic (re)construction of landscapes, through reasoned data, confirmed the recovery of the natural elements interfered sense culturally constructed by the Amazon man/woman, so even these senses allow them to perceive and represent different modes of the natural elements that surround them.

From the data analyzed, it was found that although the water has a privileged role in the lives of employees, the bank of the river, living between the river and the forest, these communities investigated today no longer allows them to see the problems of the Amazon.

This living riverine, while still offering questions about origins and destinations that man/woman and water transcends its materiality and they impose a whole series of ideas about living by the river, the narratives that have returned to a psychic reality built on experiences generated from these waters, they had also the great changes that occurred in this life that transforms objectively and subjectively that human being and exhibited their world lived as a reified universe.

A reality that has shown that although the reveries and the construction derive from the water that surrounds the object acquired the condition of the other. A space perceived by these men/women through their situation.

As for these *portovelhenses* communities, it became clear that their social representations in relation to water is no longer anchored in previous living conditions (fishing plenteous floods with certain times, breeding and planting space), are anchored in adverse conditions (construction of power plants, lack of fish, down barriers and, constant flooding).

Thus, the riverine community is that once allowed them to flow into the imaginary with a spontaneous wonder at the chances, myths and legends, no more privileges with the contemplation that led them to look at things with reverie and free enjoyment of imagination. In *portovelhenses* communities, this reality reaches the very objectification of being a river and leads to see that same water for them previously established their identity and allow them to build a dialogue between the subject and the world in a valued territory emotionally today creates diversity of relations and tension between these two spaces, articulated and contradictory: the small individually significant spaces and macro spaces socially constructed.

The banks of the Madeira River, which once seemed to require logic to be consistent today, presents the communities in crisis, the communities of life senses and communities no longer agree. What makes it difficult to maintain the consistency in the processes that form the personal identity and also promote the emergence of logical tension and concern for their own lives and with their water, forming a social group composed of the different communities and leading to a strengthening of common goals.

The *Guajaramirense* community showed that builds and/or re-evaluate its senses from the media and the common census and, although still present some serenity in living near the water, also shows logical concern with its water and its life. This concern stems from the observation of the siltation of rivers, the massive deforestation, by the fear of building new dams in its waters.

The serenity that water stems, still present in *Guajaramirense* community gave way to unrest in *portovelhenses* communities. The experiences of daily life, reading the water in predicting storms, drought, good time for planting or the tourist beach today, shown in strangeness to the Madeira River.

The admiration and wonder that was born of the very contemplation of water, the particularities of which sprouted sensations and allowed the river spirit dream and see in natural phenomena metaphoric explanations, a poetic illuminated by religious myths, forms of explanation through non-representable representation in their narratives proved absent.

However, in this space where the Amazon water is not only a natural resource or a carrier landscape of natural beauty, incantations, myths and beliefs, water still shows more. It represents the life of these communities. A life made up of important pieces that make up the mosaic of cultural landscapes investigated.

It was recognized, therefore, the importance of geographical studies for urgent interventions in administrations, grants and/or developments in the waters of the Amazonian rivers. An important watershed that has been used without regard to the senses and meanings of local human beings. Irresponsible use free of grants provided by the National Water Agency (ANA) illegally, since in any Amazon river, there are basin committees that, according to the Water Law (9,433/97), should be responsible for planning the use of water.

With this study, the Cultural Geography opens up prospects before ignored and unmask themselves felt in the diversity that can and should indicate ways to projects in Amazonian waters that take into account the way culturally constructed in these geographically located communities, avoiding this environmental crisis with inadequate management practices.

One of the major limitations to the development of this study was the researcher's inability to cover a greater number of communities, since, as mentioned in the introduction, the Amazon is vast and diverse, and requires time and money to the researcher's displacement to different communities. However, this problem can be easily solved, with the involvement of a large number of universities and researchers in order to understand the logics of communities, aiming at the responsible management of the Amazon Water.

In a time when the problem with the shortage of water is felt in several Brazilian regions and worldwide, with pollution and siltation of rivers, it is extremely important to (re)think about water conservation in the Amazon. Geographical studies, from the sense perceptions and social representations of Amazon man/woman are imposed. This because these are logical, from geographically localized communities, which may help and provide the cognitive tools necessary for management policies that lead to grants and/or projects with greater responsibility.

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