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Narratives of Environmental Issues at the Pradoso's District of Vitória Da Conquista City in Bahia State/Brazil

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Keywords: ecology of knowledge. intellectuals of tradition. narratives. GJHSS-B Classification: FOR Code: 050299

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INTRODUCTION

his research aims to report the intellectuals of tradition' narratives, and they refer to traditional residents with long experience of life in a community. Almeida (2017) elaborated the concept of intellectuals of tradition opposing to the restricted use of intellectual connected to a task of scientific and academic practices. She wrote her stance at the tracking of Edgar Morin's thinking seeking to critic modern science perspective and re-establish a dialogue between science and tradition.

The emergence of modern science brought a specifical logic of think in unconnected disciplines and at the same time in opposition to all forms of knowledge that was not legitimate in a discursive method that aimed to separate, test and mensurate. The concept of science, in accord with all spirit of modernity, guided a

new world introducing by the enlightenment and the development of capitalism.

One of the first disruptions of modern science was the divorce between philosophy and science, speculation and experiment. As a result, the predominant thinking of science starts to support the stance of an outward scientist that can get out all influences of his subjectification such as values, beliefs, and symbolic myths. The second was the change of speculative writing by a scientific discourse resulting in variables and its mensuration. This conception of science was useful to the development of capitalism and legitimated a process of scientific naturalization that imposed the mode of knowing from Europe to all cultures around the world, undervaluing traditional knowledge of other people and specific cultures.

The historical process of modernity put in different sides, the science with an empirical, rational and logical discourse, and traditional knowledge including the philosophy that still received influences of the symbolic, mythic and magic narratives. This disruption was the base on which the way of knowing became more specialized and disciplinaries, and more useful and adequate to the modern capitalist society.

This modern way of thinking had many critical stances during the last century. Almeida (2017) pointed out authors like Ilya Prigogine, Edgar Morin, and Bruno Latour as critics of this modern knowledge. Still, she will construct her proposal based on Edgar Morin's theory of complexity. In this way, she put in emphasis on nonparadigmatic forms of academic workings accepting in its uncertainty, essays, and speculation.

Almeida (2017) augments favoring the nonhierarchy relationship between science and tradition, standing up for a different form of reading the world and using strategies that are closer to a sensitive logic. Different from academic sciences, intellectuals of tradition deliver their discourses using oral narrative, cultivating а listening and vision of physical phenomenon, animal behavior, plants, climate dynamics, and so forth. Almeida talking about this reading of the world, said that narratives be able to express what Gregory Batson named "pattern of interconnection", that is, a specific perception of this intellectual to read and make sense among things involving nature and human.

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Another argument that we bring to this research as a convergence with Almeida (2017) came from Santos (2010a, 2010b) and the demand to do justice to traditional people. The predominant and Eurocentric conception of knowledge over modern history denies all forms of knowing that do not agree with the Western understanding of the world. Santos pointed out the way out of this "epistemicide", Ecology of knowledge that considers the non-scientific comprehension of these peoples and goes against epistemological practices under the dominant paradigm of modernity.

An ecology of knowledge demands a gesture of conciliation in an intercultural approach and accepting it does not mean denying important scientific knowledge construct during the history of modern society. For instance, if you need to travel out of earth space, you must necessarily use all available technological resources. But if you will travel through the Amazon Forest, an experience of indigenous peoples makes it easy. There is no formula to this new and postcolonial thinker, only an open way of thinking and considering many experiences.

The subject of the research is the Pradoso district community located in the western portion of the Vitória da Conquista city in Bahia State/Brazil, 12 km from the municipal headquarters, with about 3,231 inhabitants (BRASIL, 2010). When we visit there, we could see signs of a devastating nature and a series of environmental disorders caused by activities such as the production of bricks, cookies, flour, other derivatives of cassava, agriculture, and livestock. Other activities are also included, such as eucalyptus culture and mineral exploration (MAIA; FONTES, 2011).

Moreover, if you look at it in detail, you can see houses constructed in an older lakebed, absence of riparian forests at the land adjacent, a worn-out soil and the sand of this lakebed removed to make bricks, no birds or other animals that are common at the rural areas, portions of sand that come from the hole resulting of excavation for a company that explores *Bentonite* - an absorbent aluminum phyllosilicate clay consisting mostly of montmorillonite.

Maia; Fontes (2011) have been studied the environmental dynamics of this place and making a reporting of environmental issues. Nevertheless, we consider older inhabitants' narrative to ascribe through the time different sceneries of this place and how nature was affected by a specific human action for a long time, reviving the feeling of these people about the devastation.

The paper aims to deliver narratives of older people of this community, including opinions, beliefs, values, representations, human and social actions from the perspective of these actors in intersubjectivity (MINAYO, 2012). The use of semi-structured and narrative interviews addressed issues of these intellectuals concerning the environment and their historical perceptions in a long coexistence with this community. Benjamin (1975) affirmed subjects are always involved with events in their narratives, and this text will offer an opportunity to express environmental issues produced by intellectuals of tradition in their community.

I. Theory and Methodological Proposal

a) Intellectuals of tradition' narratives

Since its beginnings, the desire to know more and more has led the human being to produce different strategies of thought. Lévi-Strauss (1976 apud ALMEIDA et al., 2013) draws our attention to the relevance of this ancestralism that preceded modern science and constituted the substrate of civilization. He considers the ability to observe and reflect continues even nowadays adapting to important discoveries.

Lévi-Strauss (1976 apud Almeida et al., 2013) pointed out knowledge of tradition is on the margins of scientific and institutional knowledge. Such as developed throughout human history, it corresponds to a "first science" closer to nature and which currently coexists with the development of technoscience in a global world. "[...] It is not, therefore, a stammering state of thought, but it is a model of understanding the world that parasitizes and constitutes the human condition" (ALMEIDA et al., 2013, p. 09)¹.

In this sense, traditional knowledge should not be understood or even reduced to an essay or a stage before a scientific explanation because these (tradition and science) express experiences based on different references and strategies (ALMEIDA, 2017). Despite all the efforts of sciences to suppress traditions, many traditional communities have not yet been co-opted by scientific culture, such as, for instance, the peasants, indigenous, *quilombolas*, riverside, seafood fisher, and gypsy communities. The permanence of tradition and their survival depends almost exclusively on its knowledge and techniques making these individuals opposite their difficulties develop creative solutions to their daily problems.

Scientific and traditional knowledge does not correspond to higher and lower levels of knowing; these only manifest different scales of readings. They express the: "[...] universality of human thought in the face of things, articulating the same operations build throughout the history: identifying, distinguishing, relating, hierarchizing, opposing, building significant sets" (ALMEIDA, 2017, p. 75, own translation). These ways of knowing used to have their strategies closer to the logic

¹ "[...] Não se trata, portanto, de um estado balbuciante do pensamento, mas trata-se de um modelo de compreensão do mundo que parasita e constitui a condição humana" (ALMEIDA et al., 2013, p. 09).

of the sensitive (LÉVI-STRAUSS, 1976 apud ALMEIDA, 2017).

The emergent modern science failed to register it, and for this reason, it lost traditional knowledge incurred an inestimable debt with this cosmology of thought. Orality does not only precede but sustains rationality and provide an extremely fruitful dialogue among the different matrices of knowledge (VERGANI, 2002 apud ALMEIDA, 2017). It demands: "The fertility of this dialogue requires, however, that one does not reduce knowledge to the other, that one does not validate by criteria stipulated by the other, since they are different strategies for thinking about the world" (ALMEIDA, 2017, p. 114).

The advent of modern science to affirm as superior knowledge was also marked by the replacing of the "old sage" by the "modern intellectual". The magical priests were responsible for announcing sacred discourses and acting as producers and guardians of myths. Intellectuals, nevertheless, submitted all myths and sacred discourses to the proof of rational and objective criticism, becoming prophets of scientific and universal ideas (MORIN, 1986 apud ALMEIDA, 2017).

The distinction between wise and ignorant was another hierarchical division resulted in modernity. On the one hand, modern intellectuals despise all knowledge that was not considered operational or technical. On the other, the so-called illiterates who had an extraordinary understanding of animals, vegetables, fishing techniques, medicinal herbs, production of instruments, among others, had their ancient civilizations massacred by the so-called superior beings and cultures (MORIN, 1998 apud ALMEIDA, 2017).

The development of sciences produced a kind of effacement of the rural and traditional populations continuing to systematize a diverse range of knowledge to solve daily problems and building a "[...] rich corpus of symbolic and mythical understanding of the world" (ALMEIDA, 2017, p. 47, own translation)². These cognitive patterns of living and knowing to express more and more complex how some people stand out for their different way of observing phenomena and creating method. deciphering specific and explaining; systematizing, reorganizing, and polishing the representations about the world.

These individuals receive different names depending on their culture and history: "[...] shamans, witchdoctor, healers, a council of elders, priests, scientists" (ALMEIDA, 2017, p. 48, own translation)³. Regardless of the peculiarities where they live, some of them developing with more insight and perseverance the ability to reflect, understand, and speak about the

phenomena. Called intellectuals, they can handle information, transforming it into pertinent knowledge, and live-in traditional cultures.

Intellectual on this situation is not synonymous with the owner of scientific culture. He is every individual capable of systematizing information and transforming his observations into knowledge and seeks to keep curiosity about his world, who observes the different faces of the same phenomenon and refines daily his gaze on new, contradictory, and complementary information. An intellectual is one who is not satisfied with a single interpretation. (SILVA; ALMEIDA, 2007).

It is vital to say intellectuals of the tradition are not opposed to academics. They are the same but favorite some cognitive strategies over others, using specific mental models carried out by their experiences of life and how they proceed to spread their knowledge (ALMEIDA, 2017). Academic intellectuals often describe their results as common sense. However, they produce sciences that although operating through universal skills expresses different contexts, narratives, and method.

b) An ecology of knowledge

According to Santos (2010), the epistemological paradigm of modern science that emerged in the scientific revolution had scientific knowledge as the only valid form of experience based on the separation between human/nature, subject/object, nature/culture, body/psychic, as well as reducing the complexity of the world that excluded all forms of knowledge that did not rely on these and other dualisms. This vision produced a peculiar understanding of the modern world that followed the empirical-rational procedure based on experience, observation, and reason.

In this sense, the epistemological assumption of modernity excluded all disagree with cognitiveinstrumental rationality, thus creating the monopoly of science in the name of colonialism, making improper other experiences and wasting wealthy perspectives present in cultural and multifaceted diversity. (SANTOS, 2010).

During the twentieth century, the advance of modern science was the expression of its limits, putting in question the sovereignty of the current epistemological model (GOMES, 2012). In this context, Santos (2010b) presents Southern Epistemologies as a rebuke of modern science. He points out the exclusion and suppression of cultures and widespread knowledge that embracing African descendants' people, peasants and indigenous, understanding the colonialism beyond the use of domination by force and comprised an extremely uneven hegemony of perception (SANTOS, 2010b).

Southern Epistemologies aim to overcome the modern Western thought as abyssal thinking through imaginary lines that divide and polarize the world into North and South, fragmenting between those who are

 $^{^2}$ "[...] rico corpus da compreensão simbólica e mítica dos fenômenos do mundo" (ALMEIDA, 2017, p. 47).

³ "[...] xamãs, pajés, curandeiras, conselho de anciãos, sacerdotes, cientistas" (ALMEIDA, 2017, p. 48).

"on this side of the line" and those who are "On the other side of the line". The division makes one side of reality disappears, becomes it non-existent or even as a result of non-existent (SANTOS, 2010).

Southern Epistemologies comprise a set of cognitive practices and knowledge validation criteria based on the experience of these social groups that have suffered and still suffer the injustices of the modern scientific paradigm. Santos proposed to discuss the social, political, cultural, and epistemological problems of society, considering our sufficient or adequate knowledge to fight consciously for global social justice that is only possible to consider a worldwide cognitive justice.

Post-abyssal thinking is a new way of thinking about society. Global cognitive justice is egalitarian, and the construction of intellectual discourse must be equitable in the world, valuing the diversity of experiences. Santos's argument in favor of an "ecology of knowledge" that implies exploring the internal plurality of science as an alternative scientific practice, providing interaction and interdependence between scientific knowledge and other types of experience (SANTOS; MENEZES, 2010).

The ecology of knowledge demonstrates that there are other valuable modes of intervention in the real. As an example, Santos (2010b) pointed out the relevant role of peasant and indigenous knowledge in preserving biodiversity, given attention to the vast, wealthy experience of these communities to made it possible and preserve "[...] ways of life, symbolic universes and vital information for survival in hostile environments based exclusively on oral tradition" (SANTOS, 2010b, p. 58, own translation)⁴.

The ecology makes possible the dialogue among knowledge that can be useful for the progress of social struggles by those who intervene in them. However, it comprises a still embryonic idea that can only develop based on the different forms of experiences. To think and promote diversity and plurality, it is not auspicious that modern science is neglected, or much less refused. There is a vast constellation of knowledge that coexists with the practices of non-scientific knowledge, that have survived the epistemicide, or that have emerged in the struggles against inequalities and discrimination arising, above all, from the hegemonic epistemological model.

c) Narrative inquiry as a research method

This work is an empirical study of narrative inquiry to understand the perception of the environment. The data was collected employing semi-structured interviews with four traditional residents living over 70 years ago and have spent their entire life at the Pradoso district of the Vitória da Conquista city in Bahia State/Brazil. The interviews recorded obtained the narratives about their ways of life and environmental issues belonging to the culture of this peasant community. The dialogues were fully transcribed and, subsequently, organized in the process of analysis.

At first, we must draw attention that they did not assume any ethnic or collective identification despite many papers in human and social sciences have spread the concept of "traditional populations" referring to these social groups (DIEGUES; ARRUDA 2001 Apud ALEGARE; HIGUCHI; BRUNO, 2014). Second, Almeida (2017) presents the argument that these people can be "intellectuals of tradition". In this sense, the challenge of this working with narratives is to transform information into knowledge reporting their representations of the world, as they understand, interpret, and can only be expressed if not by themselves.

Working with narrative demands to put into question the difference between narrating and description. In an attempt of it, we will refer to Lukacs' (1965) text entitled "narrate or describe?" using its criteria to distinguish these terms in writing. Lukacs affirms that narrating is a type of intersubjective involvement that considers the life and the problems of the community, what is in our vision more adequate to intellectuals of tradition. On the other hand, the description is a more objective relationship, an observer position, because it does not directly cause an interrelationship between the facts and the subjects.

Hence, the narratives come to narrating because embracing life, and at the same time, environmental issues of these people. The text clippings are narratives that allow us to talk about their world without being assimilated into ours. Indeed, our production is still incomplete without these narratives considering the long-term experiential knowledge as a narrative of what was the environment in comparison to what it is in nowadays.

The history of the Pradoso community began with Portuguese emigrants. During the years of 1959 and 1960, the brothers José Nicolau and Domingos Rodrigues do Prado settled 12 km from Imperial Vila da Vitória that is in nowadays Vitória da Conquista city (NOGUEIRA, 1988). Since 1935, the district was known "Furado das Éguas", and it started to be called Pradoso due to the junction of the surname Prado -from that family - with the number twelve referring to the distance from the municipal headquarters (Prado + doze (12) = Pradoso, in Portuguese) (JESUS, 2012).

Pradoso is a settlement inhabited in a disorderly manner where houses, lots, and blocks are randomly distributed. The roads, with few exceptions, have no paving. Regarding public services in nowadays, it has an elementary school and a health post, building and maintained by the city hall, as well as a high school

⁴ "[...] de modos de vida, universos simbólicos e informações vitais para a sobrevivência em ambientes hostis com base exclusivamente na tradição oral" (SANTOS, 2010b, p. 58).

belonging to the educational structure of the Bahia State.

The location has a negative humidity index and the absence of a water surplus. The total annual rainfall varies between 500 and 800 mm. Despite the difficulties related to access to water, Pradoso has considerable water potential due to two streams, the Quatis and the Gameleira streams. However, without planning and public policies, the inhabitants of the Pradoso have been with a series of water situations. (ALVES; ALVES, 2007).

The empirical research works with the narratives of four old inhabitants of Pradoso and the interviews were carried out between August 2017 and February 2018. The oral and narrative interviews to map environmental issues pertinent to the local reality, emphasizing the socio-environmental aspects. We did the interviews with four retired rural workers: Mr. Jonas, 80 years old; Mr. João, knowing as "Janga", 73 years old; Mr. José "Seu Zequinha", 84 years old and a breeder of dairy cattle; Mr. Auzil called "Seu Zil" 70 years old and a small producer of curd.

II. Results and Discussion

During the interviews, we asked about the environment emphasizing the issue of water resources, the use of medicinal herbs, predominant crops, environmental degradation, flora and fauna, the relationship with nature, and observations of changing landscape throughout of time.

The interviews begun to refer to the perception of the environment, and the responses reported the water issue and the damage caused by the drought. One of them said:

[...] I understand the terrible thing here for us [...] is the water because the drought is terrific here. [...] These lagoons dried up; some existed here in the '60s and '70s. It gushed water, today it dried, it did not add more water ... It has been 20 years since it dried [...] it did not rain here anymore [...] it rains a little, it is dry here [...] There was nothing else. We plant and the earth gives nothing (JONAS, 2017)⁵.

It considers the interviewees' concern valid since the district is in a region of predominantly semiarid climate characterized by low rainfall - on average 717 mm/year - with a concentrated rainy period between November and January (JESUS, 2011). The riverbed of the district makes part of a relevant hydrographic network. It composed the principal source of the Quati stream flowing into the Jibóia stream, an affluent of the Pardo River that makes up a federal hydrographic basin (JESUS, 2011). However, the long periods without rains and the inadequate use of water in many economic activities cause inconveniences and result in worn scenery.

The image narrative of Mr. Jonas brings a representation that disagrees with the current environment showing a relationship with the water that no longer exists. This background image is only possible if we accept it as part of Pradoso's history. We can affirm that the lack of public policies, the increase in population density, and the disordered urban expansion have implied in the degradation of the water sources in Vitória da Conquista. However, the images improved and make the scenery more concrete, expressing their sense of reality. Mr. Jonas called attention to the fact that there is a course of the river there like you can observe at the clipping's, and if you take into consideration the hydrographic network. In the past, the same river course gushed water, now it is only a dried and unproductive earth.

These aspects and low rainfall have caused a water crisis that affects the inhabitants of the municipality, including the Pradoso district, especially concerning economic and subsistence activities like agriculture, extractive, or fishing. About it, Mr. Zil nostalgically remembers:

"[...] it didn't rain more [...] when it truly rained you would go there at night [...] with the can, a lamp and the fishes (traíras) jumped over at night [...] people said: oh, tonight I'm going to get a big fish (um trairão) at the 'moiadô' (shade in the middle of the pasture where the cattle take refuge and rest from the sun). Each one caught a huge fish [...] in all water at this low."⁶.

After listening Mr. Zil, we ask if he knows one of the causes of the drought, and he replied: "[...] listen well! According to the man who studies the stars, this place here will turn to desert. Each year it rainless. In the past, the Pradoso had already filled with water."⁷.

Although we have not found studies on a possible desertification process in the Pradoso region, Paixão et al. (2009 apud Santos and Aquino 2017) identified irregular and discontinuous patches conducive the Bahia State to desertification. Therefore, if studies or public policies are not prepared, some places like Pradoso will suffer of desertification because it already brings aspects for this process.

The interviewees remembered a socioeconomic problem that causes environmental damage. One of the sources, the Bocanha lagoon is grounded,

⁵ [...] entendo é a coisa terrível aqui pra gente [...] é a água, pois é uma seca terrível aqui [...] Essas lagoa secou, umas lagoa que tinha. [...] foi no ano de 60, 70. Ela ficava abanando água, hoje secou, não juntou mais água... Já faz uns 20 anos que secou [...] não choveu mais aqui [...] chove pouquinho... Aqui é seco [...] Não deu mais nada. A gente planta, não dá nada (JONAS).

⁶ [...] num choveu mais [...] quando chovia mermo cê saia de noite [...] com as lata, com uma lâmpada e as traíra de noite elas malha [...] gente falava: ó hoje de noite eu vô matá uma traíra no moiadô dava cada uma traíra enorme [...] em toda essa baixa era água.(ZIL)

⁷ "[...] a seca, escuta bem! Segundo os homem que estuda os astro, aqui o norte vai virar deserto. Cada ano vai chover mais pouco. A gente no Pradoso [...] e toda essa baixa era cheia de água".

and houses are built on it. According to Mr Janga: "[...] this path over there, these places that you can see, these low-hanging houses are because it has not rained more like it used to rain in the past, but if it rains more than two hundred buildings could stay inside Water. They only ground the lagoons and making them homes."⁸.

These houses, like the other residences in Pradoso, do not have a sewage network, and residents use pits to dump their waste leading to contamination of the soil and groundwater. During rainy periods, the canal can overflow and contaminate the water besides causing flooding of the homes and collapse of the buildings.

Concerning the Mata de Cipó that is local vegetation and a transition area between the Biomes of the Caatinga and the Atlantic Forest, there is a mixture of species characteristic of the two biomes, and endemic species little known (JESUS, 2011). Over a long time, native flora has been and still indiscriminately removed for different economic activities, such as charcoal production, flour roasting, brick burning, furniture making, among others, without proper handling and the absence of reforestation practices.

About it, Mr. Jonas regrets the occurrence of deforestation. Also, he makes a relationship between the devastation of the native forest and the water crisis at the Pradoso: "[...] the people ended the liana bush here because it was bush, more bush ... The people ended it all. Only the 'capoeirão' left and the forest is gone. He says the bush pulls the rain, and the people ends it at all, it is all over in this terrible drought."⁹.

Regarding the species that existed before deforestation, Mr Jonas recalls: "[...] there was the bastion, there were [...] the same wood from vines, *braúna*. There is still a *braúna* right there [...], there is an iron stick that was up there [...] in the old-time [...] my father used to say that people removed the good wood [...], *vinhático*, even cedar had everything here."¹⁰.

Still, on the Pradoso's flora, Mr Zil recalls the fruit species that also became scarce with deforestation: "[...] there were [...] teresinha fruits, cambuí, oi de boi [...] cadela [...] grapiá, gameleira fruit [...] jatobá [...] the

Deforestation is one of the environmental problems today because it affects socioeconomic aspects. From an ecological point of view, deforestation provides other damages with the alteration in the habitats causing disturbances for animals that used for food and or reproduction. Then, they end up driven away. About the deforestation process and its consequences for the local fauna, Mr Janga said: "[...] there was pressure in the forest, there was too much pressure to kill, there was an armadillo, there was everything [...] they opened everything and finished the bush, they still started planting eucalyptus..."¹².

Regarding the impoverishment of the soil that, according to Maia and Fontes (2011), occurred due to the lack of knowledge and adequate agricultural management techniques, the interviewees are responsible only for water scarcity for the damage caused to the land:

The land is good. Today the land [...] depends on the rain [...] It is just like in that forest there. In this forest there, the people boast that the land is good, but it is because it rains a lot and there is a corner that it does not rain [...] It's like here, from here, from there it was raining a lot. The people used to mow and produce, the time is now very arid, but when it gets to the point of catching a rain spike, it gives us everything (JANGA, 2017)¹³.

Regarding the use of medicinal herbs, Mr. Jonas told his mother used to use them frequently, showing that some practices are passed from generation to generation in the district. "[...] Then, only lemongrass and this Lapa grass and orange or a little lemon peel [...] here all my life uses it, my mother liked to plant these small plants to make tea, she cultivated and watered." (JONAS, 2017)¹⁴. On this subject, Mr. Zil reports: "[...] there was a wood that served as a medicine called 'for everything', another [...] called 'pigtail' when you had a bad belly, you took the bark and

⁸ "[...] essa vereda aí, esses lugar que cê ver o povo aterrano essas baxada fazeno casa é porque num chuveu mais que nem chuvia antigamente, mas se chuver igual antigamente fica mais de duzentas casa den d'agua. É aterrando, aterrando as lagoa e fazeno casa".

⁹ "[...] os mato de cipó aqui o povo acabou, porque era mato, mais mato... O povo acabou tudo, só ficou os capoeirãovéi, cabou a mata. Fala que o mato puxa a chuva e quando acaba o povo acabou tudo por isso essa seca terrível".

¹⁰ "[...] tinha o bastião, tinha [...] madeira mesma de mata de cipó, braúna. Ali mesmo ainda tem uma braúna [...], tem um pau ferro que ficou lá no alto lá [...] no tempo velho [...] meu pai falava que tiravam as madeira [...] boa, vinhático, até cedro tinha tudo aqui".

¹¹ "[...] tinha [...] as fruta [...] teresinha, cambuí, oi de boi [...] cadela [...] grapiá, fruta de gameleira [...] jatobá [...] as fruta que quando nóis era criança no tempo agente catava. Sabe? Nois catava pá pudêalimetá".

¹² "[...] de premera nos mato tinha muito, tinha de premera é fácil demais procêmatá, tinha tatu, tinha viado tinha as coisa tudo [...] foi abrino, acabano os mato, o povo pegôprantá Eucalipto também".

¹³ A terra é boa. Que hoje a terra [...] depende de ter chuva [...] É que nem nessas mata aí. Essas mata o povo gaba que as terra é boa, mas é porque chove bastante e tem canto que não chove [...] É que nem aqui, de premera aqui, de premera chovia mais bastante era constante a chuva. O povo prantava e produzia, mar agora os tempo tá muito seco, mas de chegasse ao ponto de pegar um pico de chuva aqui dá tudo quanto é coisa (JANGA, 2017).

¹⁴ "[...] Aí só erva-cidreira e esse capim da lapa e laranja e um pezinho de limão [...] aqui toda a vida usa, minha mãe gostava muito de plantar essas plantazinhas para fazer chá, ela plantava e molhava" (JONAS, 2017).

put it in the water and took it [...] you put it into the water, call it diffusion."¹⁵.

Concerning economic activities, family farming with grains, vegetables and medicinal plants is of great importance. Cassava culture stood out in the local economy. However, in recent decades the local economic dynamics have changed due to drought, as explained by Mr. Janga:

The cassava is expensive, and the people were crazy to plant, the rain is always scarcer [...] there are times when it does not rain [...], and the people go to fading. Moreover, some people still have some cassava, but [...] the manioc for working here comes from outside [...] Looks, the fields here were full of manioc in the past, today they are weak. It is a little plantation. Here everything has changed, today it is no more than a factory, of biscuits, flour, *beiju* and another part a piece of the garden.¹⁶.

During the drought, rural workers use to work with brick making. However, this activity has lost ground in the local economy due to the lack of clay, its prior raw material. Thus, workers have been looking for jobs in other activities like the mining industries, third-party farms, in family homes or local businesses, and free markets. Regarding the small reserves of clay, Mr. Jonas talked about the responsibility of anthropic action in the process of the lack of clay:

[...] In the old days, the people did many brick masonries to make houses. [...] The people sank the pond bed by removing the clay. A million bricks came from here. [...] Today, everything ended and appeared that big block. [...] The people did not make bricks anymore. Some still do a little like this [...], but it is hard [...] The clay is over [...] The good clay is over.¹⁷

In general, the lack of clay from central areas of the Pradoso forces consequently the worker man moving to another mining. It results in the consequent reduction in pottery activity, increasing difficulties of the local people in periods of drought (ALVES; ALVES, 2007). About this process, Mr. Zequinha relates the lack of clay to the impoverishment of the soil:

What did this clay become? The clay is gone. Did it not? There are many years of working. Everything is over. [...] because it was all taken away, and taking it out, it just ends. Does it not? There is the land, but it is like a flagstone, which is not for pasture. Is not? For production and to create or plant a bush, a grass, everything became hard to do.¹⁸

Pradoso's country person has been looking for other alternatives to life due to difficulties in developing agricultural and pottery activities. In this context, biscuit factories, small businesses, and sawmills stood out. About the origin of the wood used in carpentry and sawmills, Mr. Jonas informs us about the possible illegal removal of the wood. He said: "I do not know how they find this wood, which today is difficult, but it is there [...] he planted the eucalyptus, but they buy it there because the vine vegetation here the people ended because it was bush, more bush [...] the people finished everything".¹⁹

How about monthly income, many of inhabitants there are in retirement. It was of great importance for the backcountry, especially after the drought that hit Pradoso, making many economic activities previously developed unfeasible. "[...] If it weren't for retirement [...] I would be in a worse situation" (JONAS, 2017)²⁰.

Maia, Fontes (2011), and Jesus (2011; 2012) had already talked about the change of socio-economic dynamics at the district and the main activities carried out by young people and other economically active populations. The mining companies' jobs highlighted the positive and negative aspects of this type of activity. According to Mr. Zequinha, his children and other young people in the district have been working with: "[...] a truck in these ore things [...] like here on the side where they speak Santa Helena [...] There is also a quarry [...] ah good because it takes a lot of work for the class to be good [...] thank god!" Mr. Zil agrees with Mr. Zequinha ²¹:

"Here comes the mining firm [...] it started there; it was job damage by the people. You see a bit of a family man from here that everything used there. There Thank God! There

¹⁵ "[...] tinha uma madeira que servia de remédio chamado 'pra tudo', outra [...] chamada 'catinga de porco', quando cêtava com a barriga ruim, pegava as casca colocava dentro da água e tomava [...] cê bota dendágua, chama difusão".

¹⁶ A mandioca muito cara, o povo foi parano de prantá, a chuva sempre mais escassa [...] tem hora que não chove [...] e o povo vai ismureceno, mais inda dá, tem gente que inda tem umas mandioquinha por aí [...] mais as mandioca pra trabaiá aqui vem mais é de fora [...] Óia, antigamente as roça aqui era de mandioca mas hoje tá fraco. Táprantano pouco. Aqui mudou o esquema daqui aqui hoje é mais fábrica, de biscoito, de farinha, de beiju e outra parte faz horta.

¹⁷ [...] de primeiro aqui o povo fez muito foi alvenaria de tijolinho pra fazer casa [...] O povo fundou a lagoa toda tirando o barro. Aqui fez bem um milhão de tijolo [...] Hoje acabou aquilo tudo e apareceu também esse bloco aí que é maior [...] o povo não fez mais tijolo não. Uns ainda faz um pouquinho assim [...] mas é difícil [...] O barro acabou [...] O barro bom mesmo acabou tudo.

¹⁸ Que virô, como diz, barrero né? É porque o barro [...] cabô, gente [...] muitos ano aí trabalhano [...] cabô tudo [...] pruque o produto vai tirano, tirano só vai acabano né? Aí fica a terra aí mas fica feito lajedo coisa assim, nem pra pasto direito não sai porque há uns caso que tira, aquilo acaba né? Aquela produção e também pra criar um mato, um capim, uma coisa fica mar difícil também.

¹⁹: "não sei como é que eles acha essa madeira, que hoje do jeito que tá difícil, mas pega aí escondido [...] plantou o eucalipto, mas eles compra aí, porque os mato de cipó aqui o povo acabou, porque era mato, mais mato [...] o povo acabou tudo".

²⁰ "[...] Se não fosse a aposentadoria [...] tava aí numa pior terrível" (JONAS, 2017).

²¹ "[...] caminhão nessas coisa [...] minério que tem aí como aqui do lado que eles fala Santa Helena [...] Aqui tem uma pedreira também [...] ah bom porque dá trabalho pá turma é bom [...] Graças a Deus!"

was no more land, in a few more bricks, this firm came up and paid the staff here, that's it." $^{\rm 22}$

Over the past ten years, the extraction of bentonite has significantly changed the socio-economic and environmental. Still little known. bentonite comprises a mineral used in different industrial applications, namely: production of drilling fluid for drilling wells, iron ore pelletizing, sand binder for foundry, sanitary granules, animal feed, deodorization and dehydration of oils, clarification of beverages, civil construction, ceramics, cleaning material and cosmetics (TOMIO et al., 1999 apud JESUS, 2012). Besides, other activities like companies extract gravel and marble, plant, and process of eucalyptus changed the socioeconomic, environmental dynamics of the district.

[...] It is each rock saw. Here, thank God, many people are working in these jobs. These stones they take out has 30 tonnes. They are overturning the ravines of the mountain. It's not very good. [...] People use to say the eucalyptus is not good. They say it draws a lot of water, but I do not know why there is the farm that has these weirs that I had spoken. The water undermined are stronger. The tank is full (JANGA, 2017)²³.

The doubt raised by Mr. Janga about the damage of eucalyptus plantations cause to water resources corresponds to ambiguities that also exist in the academy, considering that the culture of eucalyptus has been the subject of controversial and heated debates between the agreeing positions and the contrary to the development of the culture of this exotic tree species.

We believe that the exploitation of bentonite has influence altering the local economy because hundreds of residents of Pradoso work directly or indirectly at the Companhia Brasileira de Bentonita - CBB. However, if, on the one hand, the mining is profitable because offers jobs and help to boost the local economy, on the other hand, invaluable damage resulting from it.

During the dialogues, the intellectuals of tradition did not point out negative aspects of mining. On the contrary, they have gone through many problems due to the scarcity of cassava and clay. Hence, the residents of the district see mining as a possibility of raising income every month of the year and keeping the formal work. In this way, we realized that the residents of Pradoso did not receive information from

Despite the impact resulting from mineral extraction, the development of traditional activities, such as pottery, agricultural production and the manufacture of flour and other derivatives of cassava is still relevant for the inhabitants of the district. However, these mining activities has changed the characteristics of working in Pradoso's district. Small producers report difficulties in hiring temporary labor at harvest times mainly in the June period, when there is a greater demand for cookies. Nevertheless, when many people who worked as day laborers on third-party properties find the opportunity to work in mining, they opt for formal employment.

These changes are still subtle, but the beginning of a new socio-economic and environmental configuration is notable with mining:

[...] The people came up with this ore business, they are on a mountain range, and they employ many people there. There is also another piece that removes the gravel, which waters the stone, many works in this mining work. And biscuit factory, where there is about ten biscuit factory that employs many people. And another thing you have here is a sawmill. There are about eight sawmills, some are already old, but the sawmill hardly employs anyone, the owners even work (JONAS, 2017).

Another relevant point addressed was the change in the local landscape due to the socioeconomic and environmental changes that have occurred in the region since the last decades:

[...] I remember what it was like to kill the bushes, where we used to call these places where there was no house next to Vereda [...] there were no houses [...] when I was a boy [...] those down here had no home, it was just bush. When it rains, it was water for every side. [...] We used to let cattle up there [...] the cows turned here until there near that big asphalt, and there was almost no home. After, it constructed houses about here (JANGA, 2017).²⁴

We ask too about the environmental problems in the district, and the causes and possible solutions for damage to nature. We realize the intellectuals of tradition are not aware of most of the environmental impacts existing in Pradoso, except for drought and deforestation. However, even if they are aware of human responsibility for some environmental damage, they do not consider themselves co-participants in the process, attributing the fault to their predecessors.

At the end of the dialogues and analysis of the narratives, we noticed our interlocutors could be

²² Aí vem as firma de mineração [...] aí começou aí foi dano emprego po povo. Cê ver um tanto de pai de família daqui que tudo empregado lá. Aí Graças a Deus! Tinha roça acabou, num faz mais tijolo, surgiu essa firma e paga o pessoal aqui aí táviveno disso.

²³ [...] É cada serra de brita. Aqui graças a Deus trabaia muita gente empregada nesses trabai, essas pedra que eles tira [...] ela com 30 tonelada [...] eles tá dirrubano os barranco da serra pá tirá [...] O pessoal fala que o Eucalipto num é muito bom. Diz que puxa muita água, mas eu num sei não porque ali tem a fazenda que tem esses auçude que eu falo os eucalipto é até perto e a minação nunca parô. A minação forte, o tanque só vevechei (JANGA, 2017).

²⁴ [...] eu lembro como é que era os mato, as baxada aqui, aqui de premera a gente chamava esses local aonde é que não tinha casa do lado [...] de Vereda [...] num tinha quais casa [...] quando eu era menino [...] essas baixada aqui não tinha casa, era só mato. Quando chuvia era água pra tudo quanto é canto. [...] A gente soltava gado lá em cima [...] as vaca girava aqui até lá perto daquele asfalto grande e não tinha quase casa. Aí foi enchendo de casa (JANGA, 2017).

designated intellectuals of tradition. They are individuals who, despite little or no schooling, had obtained throughout their trajectory a rich learning based on observations and reports. They are transmitted through oral communication and systematized as valid and relevant knowledge.

The knowledge produced by the interviewees was only possible thanks to their proximity to nature and the constant struggle for survival. These people are ready to face everyday difficulties. They remember events around them and are careful observers of the phenomena of nature, interpreting the world with consistency and lucidity.

Throughout its trajectory, Pradoso went through cycles of economic exploitation that also included cycles of environmental degradation. These cycles started with deforestation for agriculture - passing through the culture of cassava - which led to the degradation of the soil and the manufacture of bricks with the removal of clay from the riverbed itself. Currently, the impact of the subsoil resulting of the extraction of mineral resources.

We emphasize the narratives of the older adults helped us to reach this conclusion due to the knowledge that emerged in narratives, contributing to the few scientific research on the occupation and environmental degradation in the district. Thus, we reaffirm contrary to what scientific culture talks this knowledge is a valid form and not only common sense.

One relevant question, the knowledge of tradition is not displaced from reality and separated by objects. Intellectuals of tradition approach connecting reality. For instance, they do not only deal with plants, but also with water, animals, climate, deities, among many other aspects. Their lives relate to all these elements due to the very reality in which they live so that nature appears to them as a set of interconnected factors.

In scientific and specialized culture, contrary to what occurs in the knowledge of tradition, the elements are studied in a dissociated way. When dealing with Pradoso, each academic intellectual addresses a type of problem existing in the district that draws his attention because it is more relevant to his area of expertise. One addresses the water issue, another the deforestation, and another the change in the socio-economic profile of the residents.

Developed on the margins, these traditional understanding demonstrate the existence of thought based on homologies that interconnect properties and attributes arising from different domains and orders. It is possible to promote an ecology of knowledge, and the valuation of different knowledge. The ecology of knowledge operates in a collective understanding that aims to provide social emancipation.

Despite the wisdom that emerged in the interviewees' narratives, we could notice the lack of

knowledge, whether related to environmental, social, historical, cultural, or economic aspects. We emphasize that ignorance, regardless of its level, does not dismay the interviewees of the quality of intellectuals of the tradition, considering that one of the basic principles of the ecology of knowledge is the recognition of ignorance as a starting point but also as a point of arrival. Knowledge of tradition and scientific culture has gaps and limits. For this reason, it is essential to overcome epistemological barriers and dialogue between different types of knowledge with a view to environmental sustainability.

III. Conclusion

The reading of scientific publications, the observation of the landscape of the Pradoso, and the dialogue with its inhabitants allowed us to realize that the use of the natural resources of the Pradoso's district was and still do without considering its sustainability. This fact has generated a series of socio-environmental problems that disrupt the nature and compromise the sustainability of the social groups who live there.

Another important aspect is related to changes in the economic dynamics of Pradoso with the replacement of previously predominant activities, such as brickmaking, subsistence agriculture, and production of cassava derivatives, with eucalyptus culture and the mining industry. This economic change also transforms the social profile of the inhabitants and in the local landscape.

We note that the intellectuals of the tradition interviewed have remarkable knowledge about the fauna and flora of the Pradoso and its alteration due to deforestation. Another environmental aspect addressed in the interlocutions concerns the severe drought that hit the district and caused injuries to nature and the local economy.

The interlocutors also know the historical, cultural, social, and geographical aspects of the district. However, concerning human responsibility in environmental degradation, it is common for residents to state that the absence of rain and the scarcity of other natural resources is due to the divine will.

Although the absence of scientific knowledge, it is common for country people to resort to local knowledge to solve their daily problems. We noticed constraints by our interlocutors when they affirmed that they had little or no study, and for this reason, they could not contribute with us.

These initial interviewees' refusal denotes that these collaborators, like so many other intellectuals of the tradition, suffered and still suffer from the epistemicide imposed by modern science. In the name of science, it wastes the richness of the perspectives present in cultural diversity and in the multifaceted visions of the world they play. Thus, we reiterate the importance of developing an ecology of knowledge in favors of the valorization of knowledge systematized by traditional peoples so that they have the credibility to participate in epistemological debates with other understanding including scientific knowledge.

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