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Research Article



Rural Children's Representations of the Land

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ABSTRACT

Received: 13 Feb. 2021 Accepted: 11 Apr. 2021 In this study, we investigated children's representations of the land while they participated on a place-based environmental education program in a Brazilian rural school. Environmental education activities aimed to foster a critical understanding of children's contextual reality as residents of a rural settlement associated with the Landless Workers' Movement (MST). We focused our analysis in the representations of the land, due to the symbolism it carries for farmers and activists for agrarian reform. From the analysis of the materials produced in the activities and the field notes of participatory observation, we identified three categories in children's representations: (I) land as the provider, (II) land as home and (III) land as the biodiversity. In these categories, we observed children understand land as a constituent of their contextual reality. These results reinforce the pedagogical potential of interacting with land, particularly in the development place attachment and proenvironmental place meanings.

Keywords: landless workers' movement, rural children, land representation, place attachment, place meaning, participatory action research

INTRODUCTION

Children's representations on different aspects of the environment have been investigated in different parts of the world, such as South Africa (Adams & Savahl, 2013), Spain (Collado, Íñiguez-Rueda, & Corraliza, 2016), New Zealand (McCormack, 2002), Brazil (Bizerril, 2004; Profice, 2018), United States (Profice, 2018), United Kingdon (Bowker, 2007), including others (Alerby, 2000; Yilmaz & Kahraman, 2015). Topics ranged from understanding of the natural environment in general (Adams & Savahl, 2013; Collado, Íñiguez-Rueda, & Corraliza, 2016; Profice, 2018) and specific aspects of the environment, as rurality (McCormack, 2002) and particular ecosystems – e.g., *Cerrado* and tropical rainforest – (Bizerril, 2004; Bowker, 2007).

It was observed that factors like income (Bizerril, 2004; Adams & Savahl, 2013), place of residence (McCormack, 2002; Bizerril, 2004; Berenguer, Corraliza, & Martín, 2005; Collado, Íñiguez-Rueda, & Corraliza, 2016) and ethnicity (Profice, 2018) have influence on how children represented and interacted with the environment. These findings support the understanding that environments are cultural, social, and political constructs, affected by elements as race, class and gender (Cole, 2007). Among these factors, analysis on place of residence showed rural children presented greater prevalence of pro-environmental attitudes when compared to urban children (Collado, Íñiguez-Rueda, & Corraliza, 2016).

The differences on pro-environmental attitudes between rural and urban children are associated with the types of experiences they have the opportunity to engage with nature in these places. While rural children have day-to-day encounters with nature, and understand it as means of sustenance, urban children describe more sporadic encounters to it and define human dependence on nature in an abstract manner (McCormack, 2002; Collado, Íniguez-Rueda, & Corraliza, 2016). However, inhabitants of the rural area do not all experience the environment in the same ways, considering the diversity of cultural aspects and livelihoods present on it (McCormack, 2002; Cole, 2007).

Brazilian rurality, for instance, comprises family farmers, extractivists, artisanal fishermen, riverside dwellers, agrarian reform settlers, quilombolas, indigenous communities, among others (BRASIL, 2008), each of them with particular experiences towards the environment. The Landless Workers' Movement (*Movimento dos Trabalhadores Rurais Sem Terra* – MST) is the largest Brazilian social movement for agrarian reform (Meek, 2015). For MST activists, land is not a commodity, but an essential commons (Stedile & Fernandes, 2005). Its activism is based on the occupation of unproductive lands in provisory camps and, then, the formation of permanent settlements. When settled, its activists are encourage to practice agroecological family farming and strike for dignified livelihood, health and education in the rural area (Vendramini et al., 2016).

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Social movements, like the Landless Workers Movement, carry a pedagogical potential associated to the cultivation of attitudes, ways of livings and values within its activists (Arroyo, 2014; Caldart, 1999). MST activists, for instance, are a group that builds its social and cultural collective identity, called "Landless Identity", in its processes of organization, livelihood maintenance and daily actions of cultural formation and reproduction. The strikes for land distribution and the land itself, as means to materialize their way of living as peasants, assume a central role in the construction of the Landless Identity (Caldart, 1999).

The repercussions of MST practices in the environmental arena have been studied in terms of the insertion of the environmental thematic into MST documents (Ciandrini, 2010; Vignatti, 2005), the role of agroecology in the development of critical environmental education (Vargas, 2007) and the forms of environmental education developed in the specific settlements (Amorim, 2016; Galvão, 2006; Oliveira, 2008; Paula, 2005). Although MST contributions to environmental education are widely discussed (Amorim, 2016; Ciandrini, 2010; Galvão, 2006; Oliveira, 2008; Paula, 2005; Vargas, 2007; Vignatti, 2005), to the extent of our knowledge, little is discussed on how MST children representations of the land can contribute for this field, especially on the development of place attachment and place meaning (Kudryavtsec, Stedman, & Krasny, 2012). Therefore, in the present study we investigate children's representations of the land while they participated on a place-based environmental education program in a Brazilian rural school inserted in a Landless Workers' Movement settlement.

PROCEDURES

Research Context and Participants

The study was part of the first author's master dissertation. It took place at Chico Mendes Public Elementary School, located at Nova Estrela Rural Settlement in Southern Brazil. The settlement was formed in 1989, due to MST pressures on government to resign public lands for agrarian reform. The first settlers were MST activists, landless family farmers who organized themselves in camps to protest for land distribution. The nearest city is 75 km away from the settlement and the access to the area consists of dirty road. The predominant form of vegetation is subtropical high altitude Atlantic Forest formation, named Araucaria Moist Forest.

We visited the studied area fortnightly from May to November 2018. In this period, fourth-three families were living in the settlement, twenty-five of them associated to MST. Settlers consisted of smallholders, practicing family farming for subsistence. Twenty-five children, from six to fourteen years old attended the school. The students were divided in three cycles: first cycle (6 – 8 years old), second cycle (9 – 11 years old) and third cycle (12 – 14 years old). The school employed five women, four as teachers and one as an assistance for general maintenance. The creation of the school

dates back to 1990, right after the settlement was formed. Its creation was a result of families' claims for a public school accessible for their children to attend.

Environmental Education (EE) Activities

This was a qualitative research, based on Participatory Action Research (PAR). PAR consists of "a family of practices and procedures that have in common a democratic will, with participation and cooperation between parts involved, sharing a vision of social transformation" (Thiollent, 2014, p.15). Knowledge produced has to serve for emancipation of the people part of the process. For attaining this goal, research subjects have to be involved in the research as active participants, because the process of addressing and understanding its contextual reality in its contradictions fosters the development of a critical conscience and thus the will for changing an oppressive reality (Freire, 1987).

PAR origin traces back to Kurt Lewis action research with factory workers in the U.S. (Adelman, 1993). In Latin America, Freire e Fals Borda experiences with participatory research deeply influenced PAR (Streck, 2013). It has been applied in different areas including education, environmental learning, health, social work and feminist studies, with focus in the emancipation of historically unprivileged groups (Ballard & Belsky, 2010; Barbera, 2008; Fine & Torre, 2019; Kjellström & Mitchell, 2019; Paredes-Chi & Alva, 2020).

We entered the studied area as a participant observers. In the school, we decided, along with the teachers that we would interact with the children as EE teachers. Thus, the methods for data collection consisted on the educational activities themselves and the observations occurred in this teacherstudents setting. The research participants were the children and the teachers from the school and the children's families living on the settlement. They participated in all phases of the research, from design, to execution, and dissemination of knowledge. We defined the EE activities along the research not prior to it, as teachers, students, families and researchers were continuously planning, acting and reviewing our practices, accordingly to what we considered meaningful to the community.

As researchers, our goal was to investigate children's representations of the land, but as an EE teachers we were interested on developing on them a critical understanding of their contextual reality (Layrargues, 2000). Here, we understand contextual reality as the natural, social, cultural and historical aspects to which they were embedded as subjectivities (Cole, 2007). Activities aimed to acknowledge these four aspects. They were adapted according to the age of students, as they were developed separately for each cycle. We will describe bellow how we conducted these activities.

First, we proposed students produced texts and drawings answering the question: "What is *terra*¹ (Earth/land/soil)?" This was the first activity we developed. For the drawings, we gave them a sheet of paper and a set of color pencils. They had an afternoon to draw what *terra* was for them. They did it individually and freely. In our subsequent visit to the

¹ *Terra*, in Portuguese, can refer to the Planet Earth, to land and to soil. It was not explicit to what definition *terra* referred to, so students could represent it according to what they considered meaningful within the context. Along the text, I will translate *terra* as land, according to the meaning children implied in their discourses.

settlement, they presented what they draw for the group, describing what and why they did. For the texts, we asked them to think about it and write at a short text explained what was the first things they thought about when they hear the word *terra*. They did these texts individually, but with their Portuguese teacher's orientations on grammar and word use.

Second, we asked them to list the plants and animals that could be found in the settlement and how people interacted with them. For this activity, we first went for a walk in the settlement, where we asked children to "show us around". Along the walk we asked them to talk about the crops they cultivated, the trees and plants we saw and what animals lived in the area. On my next visit to the settlement, we asked them to list domestic and wild animals and plants they knew, characteristics they could think of and the importance of these beings. They took this list home, where they could ask for their relatives' help to complete it with more information. When the list was complete, they presented it to the group and student's discussed the differences and similarities on what they have written.

Third, students designed and performed interviews to their families and neighbors about the history of the settlement and the school. The process of design the interviews involved a group discussion on what aspects we considered relevant for the history of the school and the settlement. From the discussion, we established these four questions: (1) Why did you move to the settlement?; (2) How was the school formed?; (3) Who was Chico Mendes?; (4) Why did the community chose to name the school after Chico Mendes?. Then, we discussed to whom we were going to ask these questions. We listed who lived the longest in the settlement and decided what children were going to interview them, based on proximity.

To perform the interviews, children went to the interviewees houses in pairs. Once they were there, they asked the questions described above and took note on the answers in a notebook. After performing the interviews, students' presented how the experience of being an interviewer was and shared the answers they obtained, comparing with the information their classmates collected.

Data produced during the research was shared with the research participants in different forms. Along the research, we shared our field notes from our visits with the teachers and MST leaders on the settlement, so they could contribute with their perspectives on the aspects we were writing. During the EE practices, we had moments of discussion with the children, where we shared our feelings and thoughts about the materials we were producing. On our last visit to the settlement, we shared our reflections on a presentation to the community in their annual event called "Day of the Earth". The school organized this event to share what students did along the year with the community. Besides our presentation, students did science experiments and artistic performances.

Data Analysis

The materials produced from the activities were the field notes and recordings from classes and the children's texts, drawings and interviews. We analyzed the materials as a whole, considering they represented complementary approaches on the investigation of children's representation of land. We used Discursive Textual Analysis (ATD) (Moraes,

2003) to analyze the materials. In this analytical methodology, interpretation of qualitative data occurs in three consecutive steps: (1) unitarization, (2) categorization and (3) sharing of the information. This method understands that reading is interpretation, because one always reads according to the explicit or implicit theories it holds. Thus, the researcher's influence into the analysis is considered as part of the analysis outcome. In fact, it is the deep impregnation of the researcher in the materials responsible for promoting the emergence of the units of analysis and categories (Moraes, 2003; Moraes & Galiazzi, 2006).

Following the ATD methodology as described by Moraes (2003), first, we codified the *units of analysis*, by fragmenting the materials in search of its constitutive meanings according to the research purpose. Secondly, we compared and contrasted the units of analysis and organized them into emergent categories relative to their similarities. From this, we built the arguments that sustained the categories and drew the relationships between different categories. Finally, we organized a metatext with the reflections depicted from the previous processes by grouping the categories under a central argument.

Ethics Statement

Children were allowed to participate in the research by their parents or guardians and from the school authority. They signed an informed consent term grating this permission. Participation was voluntary and children could withdraw participation at any moment, even during the proposed activities.

FINDINGS

We organized the children's representations of the land in three categories: land as the provider, land as home and land as the biodiversity. These categories have in common that they all consider the environment in relation to people, or according to the form people interact to it. Along with the defined categories and arguments, we will present free translated excerpts of children's productions.

Land as the Provider

We identified in children productions representations of the land as the provider. They identified it as the origin of materials used in day-to-day life and the primordial source of food. In the excerpt bellow, a student presents a situation where he was interacting to land through the work with agriculture. He was doing it with his family, and while he was working, he was learning about agricultural practices he might need to use in the future. Moreover, when he states, "we have to respect it" he is addressing how this activity demonstrates people dependence on nature for survival.

[The land is] a very special place for me. I imagined my father and I planting oat. The land is something very good to live in my opinion, without it there is not where to plant oat and other types of food: like beans, rice, corn and lettuce, so we can eat. [...] And we have to respect it. Once, my brother and I planted and I learned we have to prepare the soil.

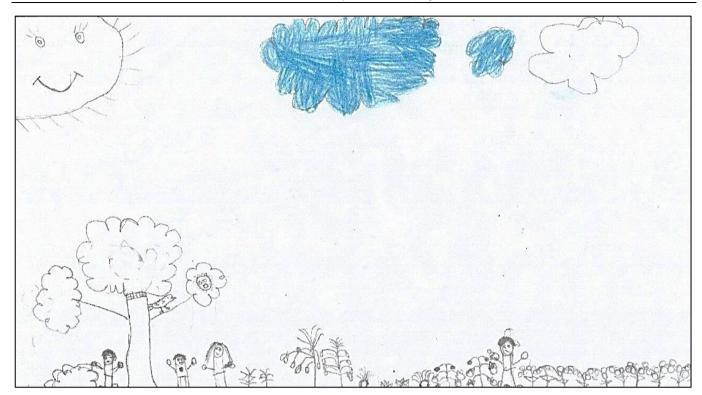


Figure 1. Child representation on "What is the land?"



Figure 2. Child representation on "What is the land?"

The drawing in **Figure 1** was a children's answer to the question "What is *terra*?" It shows, as the student described, him and his family in a cheerful attitude working in their farm. He represented all members of the family, each of them performing a particular task (i.e., harvesting tomatoes and corn). It is possible to identify in his production a variety of cultivated crops, like blackberry, tomato, carrot, corn and cassava. In addition, natural elements, as represented by the tree and the bird share space with the cultivated crops.

Land as Home

Along with identifying land as the provider, children represented it as their home. We observed in their productions that they integrated their houses as part of the land. The aspect of the land as home, is illustrated in the production displayed in **Figure 2**. In the drawing, the child represented the land with the sun, a cloud, the wind, some trees and her house, integrated in the natural setting.

Moreover, they described their interactions with family and friends in their productions, together with the types of activities they do in the land. Thus, land is where their friends and families live. It is where the school and their houses are located. It is the natural background where social interactions occur. In the following excerpt, the child points the reasons she likes the land. She mentions animals, plants and water, as well as houses and friends. She describes her interactions with nature in this context and emphasizes the need for having positive attitudes towards the environment.

I like to live here in the land because I can do a picnic and play. I think the land is very colorful. We have to take care not to throw trash in the water and soil. For me, I think it is cool. I love the land. We have to love the land, the animals and the trees. I like to walk in the nature. In the land, there are many colorful houses and many people. In the land, I like to play with my friends. People have to love the land and not to throw trash in the rivers. Here, at the land it is calm because there are not many cars. The human beings, there are some that take care, others that do not. Here at the land we have many friends.

Furthermore, land is the reason their families moved to the settlement, together with the need for education to their children, as illustrated by the text bellow. The excerpt is from an interview about the reasons student's families moved to the settlement.

First, because they did not have a land and they had their children. Second, because here it was much better and then came a movement called MST. Third, because there where they lived they were like slaves and here they had the opportunity to give education to their children.

Here, the interviewee expresses how becoming an MST activist changed her and her family lives. Before, when they were landless, they were submitted to work conditions compared to slavery. Being part of MST and conquering a land is associated to dignity and improvement in life conditions.

Besides, another representation of land among the students was using it as a synonym for the countryside, or as the opposite of city. They represented countryside as a beautiful and colorful place, as observed bellow.

I see a very beautiful place because there are colorful flowers and it rains. Here is very nice and not like the city. There, you have to pay a lot to have food, here if you plant and water you can get a lot of things to eat.

In addition, they mentioned how living in the countryside influenced the material conditions of their life, as the availability of food, water and security. When one of the teachers asked a student if he would live in the city, he answered negatively and justified as it follows.

I would not, because here you can dig a hole to get water. There [in the city] you have to pay rent to live in a house, if you do not buy one. And here if you want to plant, you can do it, you can plant many things, it is not like the city where there is just pavement. And there are

horses here and in the city there are not many of them. Also, in the city there are robbers, and people that kill others

In this answer, we identify a portrait of social problems urban settlements present, especially in developing countries like Brazil.

Land as Biodiversity

Children also represented land as the biodiversity by associating it with the beauty and richness of animals and plants. A student describes the richness he observers in nature as the different colors the flowers can present.

The land is a very beautiful place. I see the land as the nature and the trees are colorful. I have already seen a tree with orange flowers, but my classmates see different things, but the nature is very colorful. There are red, pink, white, yellow and purple flowers. And the butterflies in our path are also colorful.

When he writes "but my classmates see different things", he is pinpointing the issue of individuals perceiving differently the same natural surroundings. In the drawing in **Figure 3**, another child represented the land with the sun, trees, grass, a bird on its nest, butterflies and a deer. Here, the beauty and richness are in the variety of beings coexisting in the land.

Besides representing the biodiversity in its beauty, in a perspective of admiration, the relationship with the land as the biodiversity also involved utilitarian representations, especially towards plants. In one of our EE activities, children listed the plants and animals that could be found in the settlement and how people interacted with them. When referring to plants, a child focused on the use they could have for feeding "Guamirim [Calyptranthes concinna] is a small, black fruit and very delicious", medicine "Eucalyptus [sp.], with their leaves you can make tea for flu" and wood exploitation "Bugre [Lithraea brasiliensis], 30 meters in height, good for building fences and wood for fire".

As to animals, together with admiration, children described feelings of fear, and indicatives of territory dispute. In addition, they demonstrated knowledge on characteristics and habitat use for wild animals. One child, for instance, when describing the animals found in the settlement, highlighted how he felt towards them, "Puma is angry and fierce", what impacts they had on his family's activities in the land, "it destroys the crops", the habitat of these animals, "Capybara [...] likes to swim" and their physical traits, "Anteater medium size, large claws, huge mouth".

The image of Chico Mendes was associated to this dimension of nature. In the interviews students applied to the community, interviewees referred to him as "a hero and a caretaker of the nature". Moreover, they identified him to the local reality, when considered him a defender and a martyr of agroecology.

Chico Mendes was a dreamer who defended the agroecology, because of this he was killed. He defended the nature, because of this they put the name of the school Chico Mendes, because he was an icon of the nature.

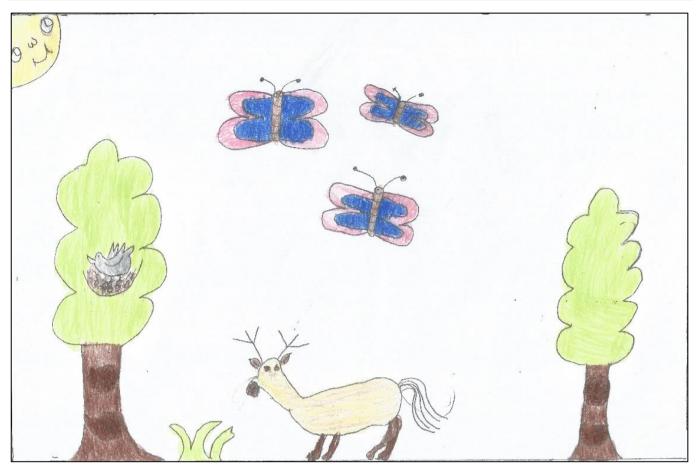


Figure 3. Child representation on "What is the land?"

DISCUSSION

In our study on rural children representations of the land, we analyzed children's drawings and texts along with our field notes on the participant observation. Children's drawings have been used before to identify their representations of the environment (Alerby, 2000; Bowker, 2007; McCormack, 2002; Profice, 2018; Yilmaz & Kahraman, 2015), as well as textual productions, focal groups and interviews (Adams & Savahl, 2013; Bizerril, 2004; Collado, Íñiguez-Rueda, & Corraliza, 2016; McCormack, 2002) and ethnographic approaches (Sanderud, 2020).

We focused on a qualitative perspective, which allowed us to verify in-depth subjective aspects of their representations on land. Alerby (2000), investigated Swedish children thoughts about the environment, by analyzing their drawings in a qualitative standpoint as well. The theoretical background in her study was the phenomenology of the lifeworld, in which a phenomenon – the thoughts about the environment, in this case – is dependent on how the context is experienced by the subject. Yilmaz and Kahraman (2015), when analyzing Turkish children drawings, also relied on a phenomenological approach to investigate children's perceptions on nature and science.

However, the use of quantitative measures has also proven to enrich the discussions on nature representations among children (Bizerril, 2004; Bowker, 2007; Collado, Íñiguez-Rueda, & Corraliza, 2016; McCormack, 2002; Profice, 2018). Bowker (2007) investigated children's perceptions and

learnings about tropical rainforests using a quantitative research design. He compared drawings from before and after a visit to the Humid Tropics Biome at the Eden Project, UK, using a quantitative scoring system. This system allowed for comparisons between drawings in terms of breadth, extent, depth and mastery to which identified themes were represented (Bowker, 2007).

Here, we performed a case study, where we opted to deepen our discussions in a particular setting. This gave the possibility of developing an understanding on the specificities of the MST children representations on land, addressing their knowledge production associated with their contextual reality. Adams and Savahl (2013), also opted for focusing in one particular context, when investigating perceptions of the natural environment of South African children from unprivileged area in Cape Town. Sanderud (2020), in his study on sensory ethnography, and Cole (2007), on her reflections about the role of critical pedagogy, environmental justice movement and place-based education in environmental education theoretical framework, addressed children from a particular group, as well.

Nonetheless, comparative studies allow the identification of similarities and differences within children from distinct contexts (Bizerril, 2004; Bowker, 2007; Collado, Íñiguez-Rueda, & Corraliza, 2016; McCormack, 2002; Profice, 2018). Profice (2018), compared Tupinambá and New York City children representations of nature. The comparisons on number of drawn elements, liveliness and animism showed that the diversity of plants and animals on drawings is

dependent on quality and quantity of children's interactions to nature. Tupinambá children, for instance, depend directly on nature for their livelihood and to grow their food. This dependence reflects on their drawings, as they described more species of plants and animals in comparison to New York City children (Profice, 2018).

Despite the methodological restraints, our findings on MST children representations on land resonate with studies on rural children representations of the natural environment (Collado, Íñiguez-Rueda, & Corraliza, 2016; McCormack, 2002). McCormack (2002) investigated children's understandings of rurality, by comparing urban and rural area residents. She observed that rural children day-to-day experiences with rurality, especially in agricultural settings, helping their relatives, shaped their understanding of rurality. Although, both urban and rural children associated rurality with agriculture, nature and recreation, rural children focused their understandings on agriculture and urban children on recreation (McCormack, 2002). These findings relate with MST children representation of land as the provider. They described their agricultural practices when defining land. For them, land was responsible for providing food, but only when they worked with it. It implies a relationship with the land, a dependence, much like what was also observed with the Tupinambá children (Profice, 2018).

The form of agriculture MST settlers practice might influence this representation of the land as the provider mediated by human interference on it. Subsistence family farming presupposes contribution of family members labor force and partial or total dependence on food produced by the family (FAO, 2014). MST children insertion in this context, where they contribute to food production and observe their relatives routines, may present a pedagogical potential to foster a sense of dependence on the land. Caldart (1999) discusses the pedagogical potential of the work with the land, in the sense it teaches about values as patience, persistence and resistance, which are fundamental to sustain MST strikes for agrarian reform and the construction of an alternative development for rural Brazil.

Collado, Íñiguez-Rueda, and Corraliza (2016) explored the influence of rural and urban children experiences with nature on how they conceptualize it. Urban children related past and sporadic experiences, while rural children referred to day-to-day encounters. Rural children talked about human dependence on nature, as they understood it as means of sustenance. They mentioned work-related experiences where they helped their families on agricultural labor. The authors concluded that these experiences reflected on rural children talking more about nature and being more aware to the need to preserve it together with people's dependency on natural resources, resulting in more salient pro-environmental attitudes in rural areas.

This study suggests rural children perceived humanity as inserted in nature, while urban children see relatedness to nature on a more abstract way (Collado, Íñiguez-Rueda, & Corraliza, 2016). In our study, we observed it on MST children representation of land as home. They place their houses, family members and friends as part of the land, and not separated from it. In addition, they described the actions they perform in nature in their understanding of land, implying it is

a place they interact with. Profice (2018) in her study with Tupinambá children also observed that humans were more present in their drawings about nature, in comparison to New York City children, to which nature was a land apart that humans have violated.

MST children sense of dependence on nature might contribute to the development of place attachment and place meaning to the territory they are inserted. Place attachment refers to a bond between people and places, and place meaning represents the symbolic meanings people attribute to places. Place attachment can occur through direct experiences with places, especially long term, frequent and positive (Kudryavtsec, Stedman, & Krasny, 2012). The work with agriculture seems to match with this requirements for place attachment. It demands direct contact with the land for long, sustained periods of times, resulting in a positive outcome, which is the production of food. However, this is not valid for all forms of agriculture. Large-scale mechanic commodity production does not offer the same opportunities for the development of place attachment.

The same goes for place meaning. It depends on first-hand experiences in places, along with learning from other sources and talking to people (Kudryavtsec, Stedman, & Krasny, 2012). Family farming, especially on an agroecological approach promotes direct experiences with places. Not only this, but it also integrates family values and interactions in its practices, considering knowledge on traditional forms of agriculture as learned with family and community members and these learnings are associated with the identity formation of the family farmer or peasant. Both place attachment and meaning contribute to pro-environmental behaviour, considering that people will act responsibly towards their environment if they feel connected to it in a positively meaningful way (Kudryavtsec, Stedman, & Krasny, 2012).

In addition, the sense of dependence developed in the work with agriculture may also contribute to the perception of nature as a relationship partner. According to Atal and Drews (2015), seeing human-nature interactions in a relationship frame might encourage the development of self-transcendent values, essential for overcoming the current environmental crisis. They argue we should focus on a perspective of mutual dependency in human-nature relationship, stressing that no healthy relationship can be based on one part using the other. This approach can affect personal identity, building an ecological identity. Moreover, the emphasis on relatedness promotes a non-egoistic perspective towards nature (Atal & Drews, 2015). MST children implied there were positive and negative attitudes towards the environment, when describing people interactions with the land. They addressed it depended on people to choose to perform pro-environmental attitudes.

Moreover, we noticed children in our study related the land with the countryside, particularly the settlement they were living in. They identified the settlement as a good place to live, where they could have water, food, housing and security, in opposition to the city, which they considered dangerous and unsuitable for living. This might relate with their family histories and their connection to the Landless Workers Movement. MST activists come from a wide range of backgrounds, from family farmers that got landless due to land distributions along generations, passing from paid rural

workers wishing to own their land, to urban residents living in poor life conditions, looking for a better life (Stedile & Fernandes, 2005).

Landless Workers Movement supports an alternative rural development, opposite from the plantation system that still prevails in rural Brazil. Brazil has one of the highest values for land concentration in the world, reflected on a Gini coefficient of 0.73 (Pinto et al., 2020). Higher the land concentration, higher the income concentration. It is in the logic of distributing land to improve income distribution that MST works. When a settlement is formed, a territory for agrarian reform is formed. A community is created, and together with it comes education, health, opportunity for collective organizations, as cooperatives, and overall better life quality. Thus, the land is not only the soil, but it represents a project for rural development based on social justice (Vendramini et al., 2016).

Children's representations of land, in the present study, had similarities with other studies on rural children perceptions of the environment, namely, recognizing land as means of sustenance and placing humanity in interaction to it. Besides, they also drawn material for their representations from the experience they have with the Landless Workers' Movement, which is represented by the identification of land as the countryside, a good place to live, in opposition to the city, where conditions are not as favorable. However, there are aspects of their representations that seen to be similar to what children understand of the environment across contexts different than the rural area (Collado, Íñiguez-Rueda, & Corraliza, 2016; McCormack, 2002; Profice, 2018).

For instance, children in our study represented land as the biodiversity that occupies that territory. Collado, Íñiguez-Rueda, and Corraliza (2016) observed that children from both rural and urban areas tended to represent the environment by its biological diversity. Along with it, the representations about biodiversity in our study showed contradictory perspectives. In one hand, they displayed animals and plants as beautiful and diverse, in a position of contemplation, as much like Tupinambá children in Profice (2018) study. On the other hand, they also identified their relationship with biodiversity in terms of usefulness, showing a utilitarian approach to it, like it was commonly observed among New York City children (Profice, 2018).

These findings suggest that, although children's representations on environmental elements can be associated with the experiences offered by their contextual reality, they are other elements that come into play when shaping these representations. As McCormack (2002) stated, children contact with discourses from books, television, formal education, casual conversations, among others, also influence their understanding in a given subject. Hence, it is expected to find variation within children from a similar context, as well as similarities in groups with different possibilities of experiences with a topic.

CONCLUSIONS

In this paper, we have explored Landless Workers' Movement children's representations of the land while they participated on a place-based environmental education program in a Brazilian rural school. We applied participatory action research as the methodological approach for the environmental education program in a critical perspective. Moreover, we aligned our insertion in the studied are as researches with the requests from the local community for environmental education activities.

In terms of children' representations of the land, we observed three main categories emerged from their drawings, texts, interviews and our field notes. They represented the land as the provider, as home and as the biodiversity. These representations have in common that they place the land as part of their contextual reality, in a perspective of a relationship with it. We argue that these representations are dependent on their experiences within their families' livelihoods as family farmers and activism in the Landless Workers' Movement.

In addition, their experiences in the context of family farming and MST activism, may contribute to the development of place meaning and place attachment to the territory they are inserted. This is due to two main reasons. First, the opportunity for frequent, long-term interactions with land, provided by the agricultural work, especially on an agroecological approach. Second, the repercussions of MST activism in the development of a Landless Identity. For instance, their families' history of struggle and connection to land as means for better life quality have a potential for providing positive meanings to the land, and, specifically, to the settlement they live.

Our results on rural children's representations about the land support the importance of children's place of residence and personal experiences in the construction of their perceptions about the environment. Further studies could investigate how the representations of the land vary across different rural contexts and how these could influence children's sense of connectedness to nature.

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