Mapping inside (and outside) the Classroom

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This reportage shows a collective process of knowledge production concerning a rural borderline region of Northeastern Uruguay. Getting to know the past and the present, and trying to imagine the future, was the means to analyze its transformations. By involving teachers, children and neighbours from five public elementary schools of the region, along with university students and professors of the Universidad de la República – UdelaR – (Uruguayan public and mayor university) from different parts of the country, we tried to re-construct the historical geography of the way of living in the area. For this purpose we applied a wide variety of techniques, such as social cartography, oral history, bibliographic review, field observations, interviews, photography, contributing to an educational interdisciplinary, inter-cultural, inter-institutional and inter-generational experiences.

Both activities described in this reportage took place in 2013. The first one was a meeting of the public schools network of the region called Agrupamiento Escolar Renacer. The second one was an encounter between 34th School and a group of Physical Education students. These small rural schools have only one teacher and 5 to 15 students of different ages.

One teaching goal of social science in elementary school is to prepare the students to live in society. For that purpose it becomes necessary to invite them to think about the reality we live in, and that this reality also has a spatial dimension. Being complex and always in motion are two main features of social reality. They make mapping – and cartography as a language of geography – a rich and versatile strategy. Maps were used in subsequent initiatives setting the basis of what we already knew and as "communication devices" with the help of which people of different origins, ages and experiences were able to interact.

Mapping with the Children: Teaching Sequence

The sequence of activities that took place in 34th School started with the concept of "place" as a spatial category of analysis regarding its subjective dimension based on personal experiences and a sense of belonging. The students developed the maps of the area they live in individually and without the intervention of teachers.

These initial maps, which were as many as there were students in the school, reflected the perception of their immediate reality. Every map was the materialization of an individual's mental construction, which opened the way for further analysis about the author's personal opinion about the presented issues. In addition, as classes in rural schools are made up of children of various ages, differences in map construction according to the children's ages can be observed. On this basis, decisions were made and future interventions were planned. That is how a walk through the area was organized. Every child brought his or her own map, making it possible that all children could become aware of the relation between what they had originally drawn and what they could see for themselves. Some of them decided to modify their maps in order to share it with their classmates afterwards.

The next step was for the class to create a "group map". Every student's perception was included on this map, which enhanced the map and enriched every child's experience by interacting with his or her classmates. Even though it was a "non-scale" construction, some cartographic elements, such as color codes or references, were incorporated. These were identified by the children by analyzing other kinds of cartography usually found in the school's regular activities. They included maps with topographic or thematic information, Uruguayan political subdivisions, world atlases, and the like.

On the next level of analysis, satellite imagery was introduced, by working with computers and the open platform Google Earth. Other elements that had not been present in the previous maps were included. Forests and plantation were identified, distances between places were not what they had seemed to be, surfaces of dams also looked different. The satellite view generated changes in the way they perceived their own places. After printing the satellite images they were compared with the "group map", establishing differences and similarities between both spatial representations. The students identified places that were important to them – where they played and had fun, places they enjoyed with their families, paths and roads that were part of their daily routine, etc. Accordingly, some annotations and additional references were added to the printed image by hand.

In the end, the exercise – which was organized throughout the school, using similar methodologies – included a space where the groups could socialize and share their work with each other. By doing so, maps were the spatial basis from where reflection was promoted. By moving from the descriptions of the spaces to their explanation, from known facts to "thinking reality", new knowledge that has the potential of being applied to other situations and problems was gained. Working on a problem that involved all areas of school made it possible to recognize and appreciate multi-causal social phenomena and the discussion about actions, actors and intentions.

Inter-Generational Dialogue with and through Maps

The first activity occurred during a meeting of the various school groups; it was organized to share thoughts and gather information on the relationship between pesticides and human health. This relationship was discussed in a project held by the school groups, the extension service of UdelaR and a group of neighbors from that area. At the beginning of the meeting, every school presented their maps. Afterwards the participants were provided with topographic base maps of their areas and had to locate, present and discuss different activities which took place there. According to the topic of the meeting, when mapping, special attention was paid to the interaction between locations of production and the watersheds of their areas. These maps provided a rich input for the meeting, as well as for subsequent activities.

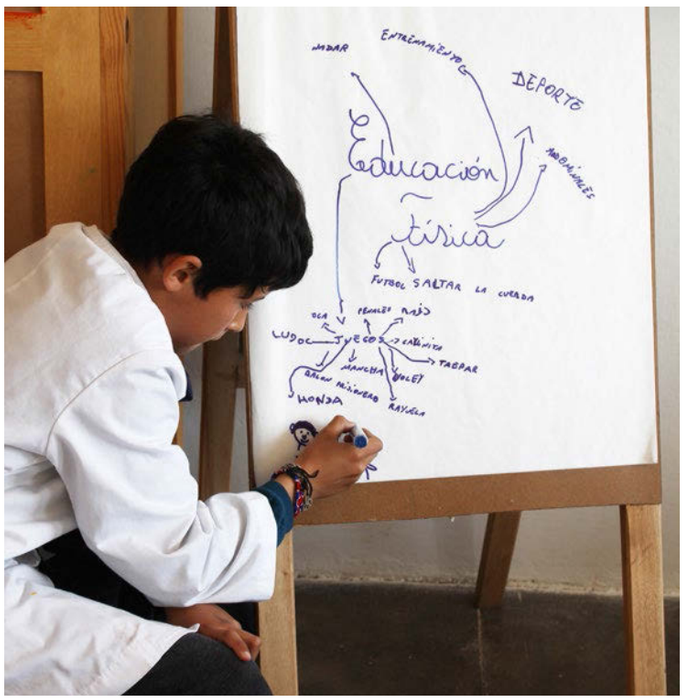
One of the activities enriched by these items was the second one this reportage focuses on. It took place in 34th School in Cerro Largo, Uruguay, located in Puntas del Chuy, and it is one of the participants of the Agrupamiento Renacer. The school was visited by a group of students from the Superior Institute of Physical Education of UdelaR (mostly from Montevideo, the capital of Uruguay, which is 400 kilometers further south), who were studying the challenges and possibilities of physical education in rural areas along with the University's extension service. The school children presented the maps they had made about their area to the young physical education students. The students encouraged the children to think about the relationship between the education of the body in the countryside and the city, the games, the physical activities and their environment. Together they analyzed the games, how the children exercised on a daily basis, and the locations where these physical activities took place. By taking a walk through the areas they were able to map and discuss the spatial relations, that had been established during other activities taking place in their territory. An example of this is the relationship between the creek where the children usually play and fish, and the new intensive agriculture that is taking place in its watershed. This agriculture includes the use of high amounts of pesticides and herbicides, which can be harmful to their health. Mapping these spatial configurations isn't enough to establish causal relations about health or environmental problems, but it enriches the collective process of asking new questions.

Epilogue

These experiences show us that maps and the process of mapping together are powerful communication tools. The combination of a variety of elements, such as colors, shapes, textures, text and numbers, provides different ways of comprehension and contribution at the same time. This is very important when working with students of various age groups or with adults from different social contexts. They have not always fully developed their writing/reading skills but nevertheless they have a lot to say about their territories. This way an important diversity of knowledge (academic/non-academic; local/foreign; adult/young child/elder) can be a part of the spatial analysis and the gathering of large amounts of information. The process of making maps on paper and/or other materializations also makes it possible for them to be read and analyzed afterwards, promoting discussions held at different times and places. Maps help to build a "common language" necessary for communication as well as for the overcoming of cultural, territorial and generational boundaries.

Illustrations

All photographs by Jimena Quintero, Walter Oreggioni & Nicolás Frank - PyCA-Project.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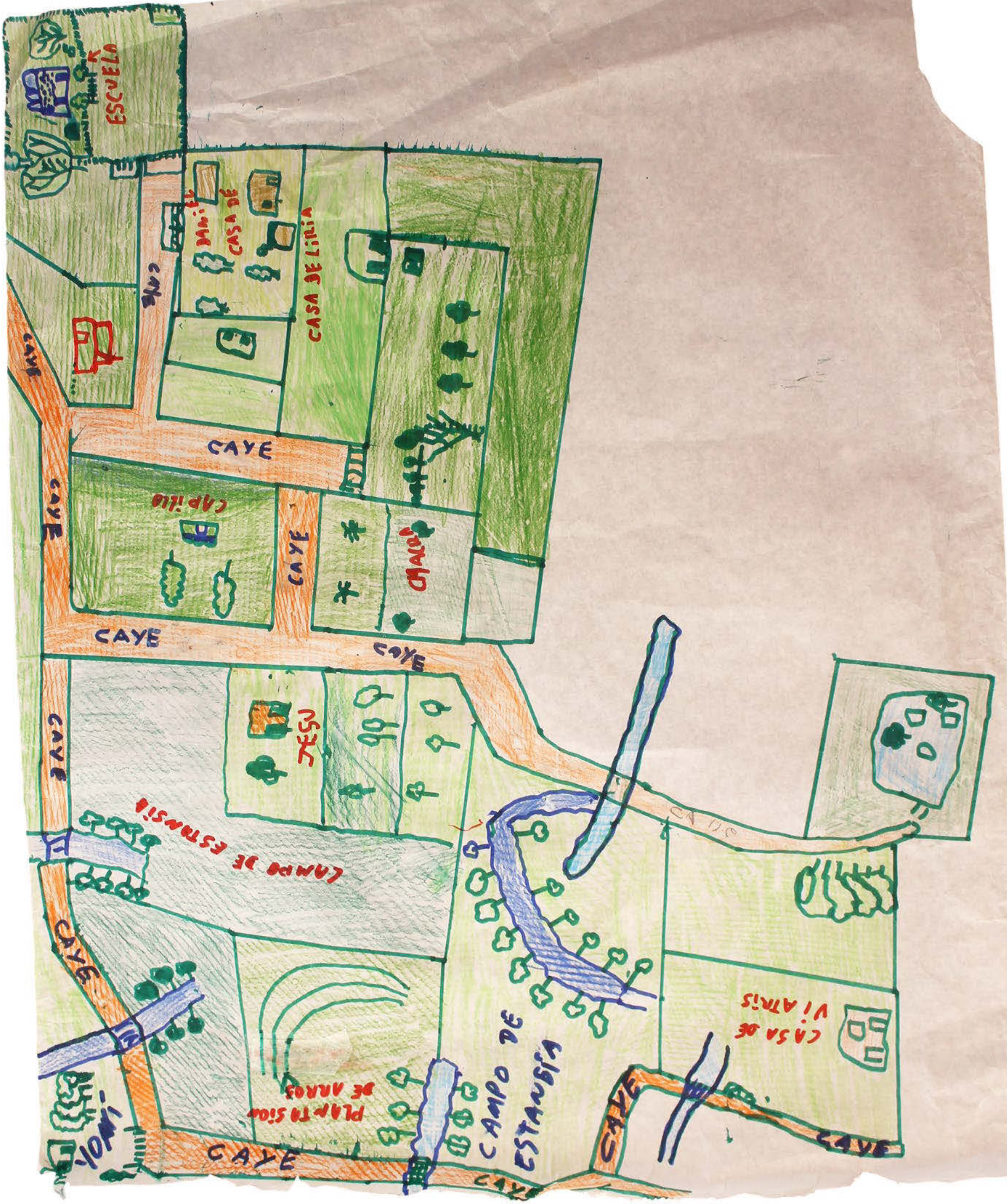

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