Networked together: designing participatory research in online ethnography
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Cartography mediated by digital technologies: new perspectives for ethnographic research

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Abstract. This paper presents some approaches to the establishment of research and new procedures involving the use of applications (App) and mobile devices (netbooks, tablets and smartphones) for ethnographic research. It is situated in the context of ongoing research "Augmented School: digital cartography and mobility for learning and citizenship" (supported by CNPq/CAPES and FAPERGS), which aims to develop a work with students and teachers at a school that received netbooks for educational use on a "One-to-One" initiative. With the development of mobile technologies, geolocation (GPS, locative media) and distributed databases online (cloud computing) arise new possibilities for the production of records and interactions in the field of ethnographic research. At the same time the diversity of the type of digital records (text, photo, audio and video) allied to mechanisms for indexing and markup (tags, hashtags, geotags, etc.) open new possibilities of research, it also requires from participants understanding of syntax and new technological procedures for the production, recording and sharing of information. Some applications for mobile and desktop computer programs (such as NVivo and Evernote) can facilitate this process, while that may contribute to the planning and organization of this production. Parallel to the discussion of these new technological possibilities and knowledge necessary for researchers, we are interested in the establishment of participatory research methodologies capable of engaging researchers and subjects in the production and analysis of data. We think that the current technological context may be able to consolidate a new scenario in the field of research, in which researchers and subjects to act as co-producers of knowledge. In this sense, the cartography mediated by digital technologies emerges as extremely rich methodological possibility as it implies the inclusion of social actors in the context of engagement with local issues and problems. Such engagement would be a necessary condition for the production of meaning through the shared and mediated use of digital technologies in the process of knowledge construction. We believe that this scenario can reconfigure both the research itself and the contract between researchers and subjects, as the action and participation become instances of authorship from which all speak and produce.

Keywords. digital ethnography, mobility, participatory research, education, locative media.

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1. Introducing the research scenario

During the past five years combined actions have been taking place in Brazil in the sense of developing digital inclusion policies throughout schools. Among those actions there are two that stand out: Broadband for Schools Program – that hired internet access plans from local telecommunication operators – and the One Computer per Student and Teacher Program (PROUCA) – that made low cost netbooks available to some of the Brazilian public schools. More recently, the State Government for the State of Rio Grande do Sul (RS), within the actions in the More Digital RS Program[11] has launched the Província de São Pedro Program (PSP)[12], having been developed by the State's Bureau for Education and Culture (SEDUC) and accounting with the support from the Bureau for Communication and Digital Inclusion (SECOM). The PSP has the intention to make netbooks and tablets available, by the year 2014, to all students and teachers located on the borders with Uruguay, and in the cities that develop Territory of Peace Programs (PTP). Besides the gadgets, the teachers will be also offered training on the pedagogical use of digital technology.

PSP has already been implemented in the schools by the border with Uruguay as well as in some schools in the city of Porto Alegre and metropolitan area. In the year 2013, in the metropolitan area, two schools – in the cities of Esteio and Sapucaia do Sul takes part in the PSP [13]. This school received two hundred netbooks in July 2012[14] and the 16 teachers have undergone an initial training carried out by the region's Education Technology Center (NTE). The school is located in the central area of the city of Esteio, being three kilometers away from the regions Parque Primavera and São José, where the PTP also takes place.

Since the beginning of the PSP it has been established that it would start developing from schools in the border with Uruguay for the neighbor country had already started implementing a similar program – saturation model 1:1, one computer per student and teacher – providing netbooks for all teachers and students in public schools. The organizer's idea was make Brazilian schools profit from the positive reflection the Uruguayan program had been having in the local community's schools from that region. Such model or saturation strategy – of one region, collectiveness or institutional networks – is one of the principles of the 1:1 model, sustained by the idea that such strategy would make the construction of different learning networks easier. However, when it was announced that the second criteria would be the development of PSP in the same cities which were developing the PTP, a circumstance has been revealed which differs from the other experiences related to the 1:1 model. The announcement raised some issues within our Group of Digital Education Research (GPe-dU/PPGEDU/UNISINOS). What is the point of developing a saturation model 1:1 in schools close or located within the Territories of Peace? What relationship can be established between the digital inclusion policies (such as the PSP) and the public security policies (such as the PTP)? Moreover, how would the use of mobile gadgets (tablets, netbooks, laptops, smartphones) proposed by the PSP stands before issues related to the violence faced by young people living in these Territories of Peace?

Starting from these first questions we develop a research project called "Augmented School: digital cartography and mobility for learning and citizenship"

[11] http://bit.ly/TK7TFM
[12] http://www.educacao.rs.gov.br/pse/html/proj_provincia.jsp
[13] http://goo.gl/maps/9GRGV
[14] http://www.educacao.rs.gov.br/pse/html/noticias_det.jsp?ID=9427

with which we intend to research the possible issues that may raise from the actions addressed by the principles of digital culture towards the local ones, the citizenship and pedagogical practices in schools located in the cities that develop the Territory of Peace Program (PTP). Therefore our plan is to implement and develop, in a participatory and propositive way, along with administrators, professors and students from such schools, a methodology based on the cartography method of research and intervention (Kastrup 2007; Kastrup 2008), which we will later approach.

The idea of developing an ethnographic based research within a context involving problematic fields of different orders (digital inclusion and public security) has appealed to be instigating. On the other hand, how could we address the intensity and the diversity of the forthcoming socio cultural process towards the actions proposed by the public digital inclusion policies and of violence fighting within an unknown context to us, and in a short term? Meaning approximately the two years scheduled for the execution of such governmental programs. It was clear to our group that the way to the participatory research was not only a political or ideological will of giving voice to the subjects, but also as an epistemological need that would make us build up a theoretical-methodological design suitable to the demand of the empiric field on which we would be in. This way, one of the research's first steps, still unfinished, was to arrange processes and instruments that could lead the researchers' team (professors, students, scholars and associates) in the production of data mediated by the same digital technologies currently being used in the schools from the PSP. Based on this arrangement and on our theoretical-methodological and technological knowledge we were about to acquire, the idea is to be able to act in a constructive way along with the responsible for the PSP previously mentioned, either directly in the school communities involved, or together with the managers and teams assigned by the State Government Agencies.

The present article sheds a light on this first arrangement with which we are all engaged, meaning we will work to present the theoretical-methodological and technological ways we are going through in order to present and discuss the cartographic method of research and intervention mediated by the new digital technologies as a possibility of participatory research under ethnographic basis.

2. Building up the cartography of the digital inclusion and public security policy

Given the complexity of the human and social phenomena, an equally complex methodology should be taken into consideration. Latest discussions on the dimensions of human subjectivity indicate the need for methodologies that are able to follow up and record subjects' paths and collectiveness within a given context. This way, the cartographic method proposed by Deleuze and Guatarri (Deleuze and Guatarri 1995), and which has been investigated in Brazil by Kastrup (Kastrup 2007; Kastrup 2008; Passos, Kastrup and Escóssia 2010) among others, has appeared as a possible way for what we intend with our research. When presenting the cartographic method Kastrup describes:

- Cartography is a method which aim is to following up a process, and not representing an object;
- Generally speaking it always investigates a production process;
- No linear path is followed in order to reach an end;

- "Cartography assumes a strict method without giving up unpredictable issues inherent to the process of building up knowledge, which constitutes a positive demand on the investigation process ad hoc" (Kastrup 2007, 19);
- Its customized construction does not impair it to establish leads with the objective to describe, discuss and, overall, communicate the cartographer's experience;
- It is based on the S. Freud's concept of free floating attention, H. Bergson's concept of attentive recognition and on the contribution of the phenomenological field of modern cognitive science;
- The cartographic attention is defined as open and concentrated, being known by four varieties: tracing, touching, landing and attentive recognition.

In order to carry out an initial cartography, based on the above stated, we traced the Internet for clues which could lead to possible nexus or meaning for this digital inclusion policy from the Província de São Pedro Program (PSP) in social contexts identified as violent and social vulnerable, particularly when developed in actions within the Territory of Peace Program (PTP).

> The Program "RS Mais Digital" ["More Digital RS"] has as main objective "To implement public policies that allow access to the Internet in a way to bring government and society together, promoting citizenship in the construction of the social and economical process in the State of Rio Grande do Sul. [RS]" This Program aims to broaden the population's access to the Internet through day by day actions and strategic projects, pertinent to the previously exposed proposal. [translated by the author.] (SECOM 2013)

Figure 1. Registering a webpage research with Evernote. Source: the authors.

The first clue we followed was to look for information about the Program "RS Mais Digital" in the website of the Government of the State Rio Grande do Sul, for we knew the PSP was one of the actions related to this Program. Besides providing the main objective of the Program "RS Mais Digital" the website also brings a link appointing to an action called Paz.Com [15]. The page informed that the action is promoting, in the Peace Territories, "community workshops" addressed to young

[15] http://www.secom.rs.gov.br/conteudo/1162/paz.com

between 14 and 19 years old, including basic concepts of photography, blog/networks, text, video and audio. According to the website, the intention of the Project is to foster "digital and electronic communication training for the youth, encouraging juvenile protagonism and enabling the experience of creating and managing a communication media" (SECOM 2013). The intention is to organize such workshops in all Peace Territories by the end of 2014.

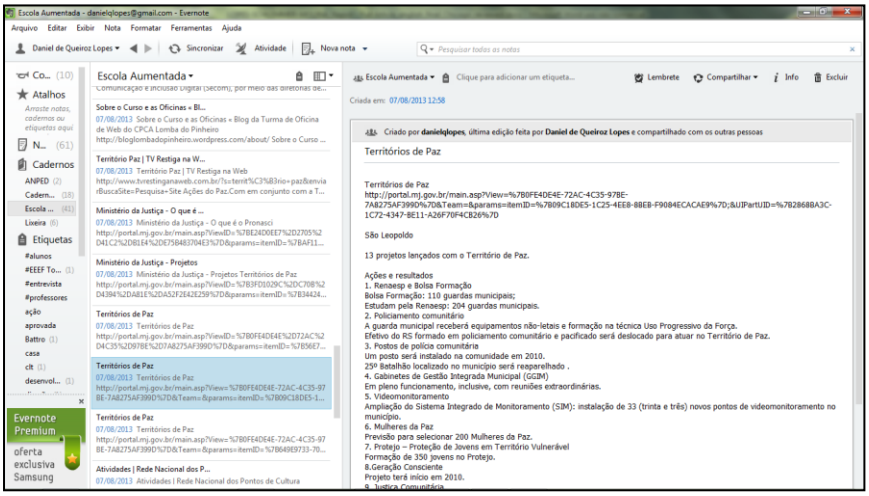

Figure 2. Evernote desktop interface. Source: the author.

Instead of merely adding the link to the bookmark of the web browser, we have used the application Evernote[16] in order to store and share these first clues, and we used its extension (plugin) for the Google Chrome[17] browser to insert a note on the online database (Figure 1). This database has been previously configured through the Evernote and identified by the name of Augmented School (in Portuguese, Escola Aumentada). Once having been created, the area in the system provided by the Evernote can be shared with other users registered in the system, who can then record their own notes. The note created can be accessed through a browser in desktop computers (Figure 2) or through mobile devices with iOS or Android systems (Figure 3). The notes can be added other media, such as audio, images, tasks to be accomplished, localization (geotag) and text comments. The Evernote, within this research context, fulfills the role of the field diary, with the possibility to integrate records in different media. The data collected can be exported to a table and later imported by other programs (such as NVivo) for their due categorization and analysis. This way all the research carried out on the Internet can be recorded and noted down in a dynamic way and also shared – with traces that become clues for the whole team.

> Tracing is an in-field swept. It can be said that the tracing attention aims a type of goal or mobile target. In this sense, to practice cartography involves an ability to deal with constantly oscillating targets. [...] Locating leads and processing sings is important for the cartographer. [translated by the author.] (Kastrup 2007, 18)

[16] http://evernote.com
[17] http://www.google.com/chrome

From the links we follow up we can trace several clues possible to map, in the first instance, a digital inclusion policy. As we have previously stated, it has called our attention having a digital inclusion program associated to a public security program. The first meaning we could build between both regards the description of the objectives of the Program "RS Mais Digital" and the Project Paz.Com. The first one establishes, as it main objective "integrate government and society, enabling the exercise of citizenship in the construction of the social and economical development processes", whereas the second one intends to encourage "juvenile protagonism" through the learning about the generation and management of a communication media. It is possible to perceive an alignment between the Project and the other objectives of the Program, for they all try to promote citizenship in the youth attending the Peace Territories by encouraging them to be the authors in digital media. It is important to highlight that the State digital inclusion policy is linked to the communication agency, and that justifies the policy being oriented for communication strategies and for the juvenile protagonism in this field. Such communication strategies can be seen in the integration of the actions involving the production of digital media, mainly through blogs created in workshop[18] and in the broadcasting of programs through the community's radios and TVs[19].

By following up the traces of this regional policy of digital inclusion we have come into the gate of the Brazilian Ministry of Justice (Ministério da Justiça do Brazil) where we have found information related to the Territory of Peace Program (PTP). This Project is inserted in the field of actions of the National Program of Public Security with Citizenship (PRONASCI), which aims to face the criminality issue by developing security policies (policing, surveillance, monitoring technology, among others) with social actions together with States and cities. The PTP is a project that forces several projects to get aligned to this policy of actions in order to foster citizenship. We call the attention to those related to cultural development as the Culture Points, Community Museums – Memory Spots, Centers for digital inclusion, Project Cine+Cultura (Film+Culture), among others. We can perceive that the PTP integrates actions to increase participation in these spaces of cultural performances in places that have been identified by violence and criminality. Under this perspective it is possible to understand that the regional policy of the State RS is to link digital inclusion policies to the promotion of local cultural development.

This way, the policy of encouraging protagonism and citizenship proposed by "RS Mais Digital" and related projects, as we so far can understand, is aligned to the national policy for public security regarding the Peace Territories. However, it is not yet perceivable when the actions of the Província de São Pedro Program (PSP) will meet with the actions addressed to the PTP. Both projects take part of the actions for the project "RS Mais Digital", but the PTP, through actions such as Paz.Com are addressed to community groups, not necessarily to schools.

> Like an antenna, the cartographer's attention makes an asystematic exploration of the ground, with rather random movements of passing and re-passing, with little concern with possible redundancies. Everything flows that way up to the point that the attention, in a receptive attitude, is touched by something. The touch is felt as a quick feeling, a small

[18] http://bloglombadopinheiro.wordpress.com
[19] http://www.tvrestinganaweb.com.br/?s=territ%C3%B3rio+paz&enviarBuscaSite= Pesquisa+Site

> epiphany that will first hand trigger the selection process. [translated by the author.] (Kastrup 2007, 19)

We feel the need to broaden (landing) what have been happening within the context in the regions benefiting the PTP and PSP, in order to analyze the processes carried out to implement those projects. We focus our attention in the city of Esteio-RS, because, as previously stated, we have heard that in that city both projects have been developing.

Figure 3. Evernote smartphone interface. Source: the author.

3. Territories, local culture and digital cartography

> The gesture of landing indicates that perception, either visual, listening or other, makes a stop or the field closes, in a type of zoom. A new territory is formed and the observation field is reconfigured. Attention changes its scale. […] Anyhow, it is necessary to reinforce that every moment in the attentional dynamics it is the whole territory that reconfigures itself. [translated by the author.] (Kastrup 2007, 19)

One of the first movements taken in order to approach the region of Esteio was to spot in the map where PTP and PSP were happening (Figure 4). The first idea we had was that both actions were being carried out in the same place. It was not what we have found out, though. The school where PSP is being developed is around 3km far from the place there the PTP is being developed, as we can see in Figure 4. This clue reinforces our question about when the actions of one project meet the ones from the

other one. In spot "D", there is the Escola Estadual de Ensino Fundamental Tomé de Souza (Primary Public School) that received netbooks in 2012 and takes part in the PSP; the spot "B" is Primavera District, first region in Esteio to develop PTP, since 2009; and in spot "C" is São José District, which has been developing PTP since the end of 2012.

The development of the projects seems to follow, up to the present time, different paths. The results of the actions related to PTP are often published in the city hall and State government websites. A Community Center and a Reference Center for Social Assistence (CRAS) were created in Primavera District where actions of the PTP are housed, such as the ones involving legal assistance, the Program to protect the youth in vulnerable territories (Programa de Proteção aos Jovens em Território de Vulnerabilidade – PROTEJO), sports and leisure, among others. Among the actions related to education and culture the City Centers of Basic Education (Centros Municiapis de Educação Básica) in the area develop the Project Mais Educação (More Education) – which offers artistic, curricular and sport activities as after school activities, the Open School (Escola Aberta) – which encourages schools to open on weekends for activities integrated to the community's needs – Education of Young and Adults (EJA) and the Integrated Program of Social Inclusion (PIIS) – which offers free cultural workshops and activities for young and children. As a result of such actions of public security and culture, the government presents data that shows a decrease in criminality indicators, including homicides. It was not possible to identify, among the actions published in the web, a single action within this territory directly related to the PSP or to digital inclusion. The only information related to PSP was about its implementation in 2012, when Tomé de Souza School received the computers and the teachers were trained.

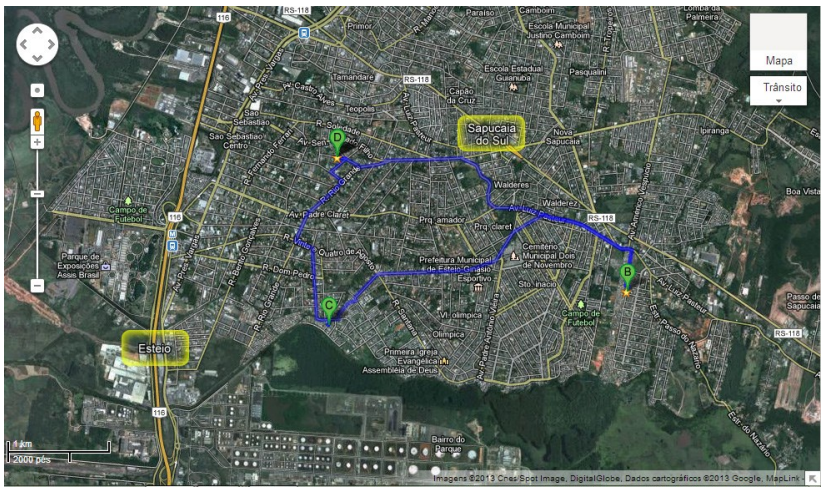

Figure 4. Places at Esteio-RS City where it has been developed PSP and PTP. Source: Google Maps[20]

One of the clues we found out when tracing the actions related to the PSP and PTP was a service created by the State's Bureau of Culture (SEC) and the Company of Data Processing in the State RS (PROCERGS) called Digital Map of Culture in RS[21]. The

[20] Obtained at http://bit.ly/10RLrfI
[21] http://www.cultura.rs.gov.br/mapa/#lat=-30.293609699999674&lng=-53.88029040000009&zoom=7

intention of this service is to make a collaborative mapping platform for spotting places and cultural associations available for the population. This way, the platform works both for the population to spot in the map points of social and cultural interests, as well as for the State to better define public policies to fostering culture. The collaborative platform also enables the population's participation that can, through mobile devices with geolocation technology (GPS), inform on cultural places within their region. The service has the following some pre registered cultural categories: Library, Cultural Spot, Archive, Institution of the Bureau of Culture, Cinema, Public Files Center, Theater, Cultural Center, Museum and Social Group. It is interesting to notice that, among the pre registered categories there is not "School". In a certain way, as we move forward in this cartography, the issue we were following of - when will the actions from PSP and PTP meet – turns into an uneasiness affecting us: are the actions from one project ever going to meet the other ones? Why aren't schools listed among the categories identified as "territories" or "cultural spots" in the Digital Map of Culture in RS?

> The attentive recognition is the forth action or attentional variety. […] The cartographer's investigative attitude would be better described as "let's see what is happening", because their main purpose is to follow up a process and not representing an object. […] Wondering around a city we are well familiar with and where we can easily move around without paying big attention to the paths we follow is an example of that attitude. As for a cartographer it is not about prompt recognition, because he has the purpose to mapping a territory which was initially not inhabited. It is not about moving around a known city, but to generate knowledge to a long research way, involving attention, and the creation of the observation territory as well. [translated by the author.] (Kastrup, 2007, 20)

This uneasiness has trigged us to carry out a new movement of searching the recognition of the cultural spots within the regions in Esteio where PSP and PTP are developed within this cooperative platform. To have a clearer idea of our findings we have compared the map of Porto Alegre, the State's capital, (Figure 5 and Figure 6) with the one of Esteio (Porto Alegre's metropolitan area).

A first evidence of such comparison regards the amount of dots marked on the map. Whereas Porto Alegre has dozens of marked dots, the city of Esteio has only the city library. Besides having these evidences, it is important to clarify that cultural and spaces or associations not showing on the map does not mean they do not exist. We have just listed the spaces addressed to cultural actions of the PTP created in the Primavera District. What may be happening is the non recognition, by Esteio population, of such platform of collaborative mapping. Furthermore, there may be a lack of using mobile digital gadgets with that purpose. It is more likely that both are happening.

Our restlessness about the meeting point between the PSP and the PTP seems to encounter in this collaborative and participative platform a possible solution that meets the needs of our project and research's goal. It is fact that in Brazil the Cultural and Educational policies diverge in several aspects, since the creation of separate ministries and government teams, until the actions that are created within city and state governments. This way, the fact that the actions related to PSP are located mainly in schools, could lead to the lack of results appearing in the Culture's Digital Map of RS. Literally speaking, if the actions from both programs do not converge, the PSP can take

over the map, the same way the category "school" has. It is obvious that this integration of actions demands both policies to communicate to each other in a way that schools and education are understood as categories directly related to culture. In this sense, an interesting action that could be implemented in the PSP was the organization of workshops in order to recognize the city territories where cultural activities could take place, as well as the establishment of Culture Spots (Pontos de Cultura)[22] wherever possible. Under this perspective it is possible to understand cartography as an activity that can manage changes of meanings around the place we live, and one of the reasons to think about the idea of Augmented School.

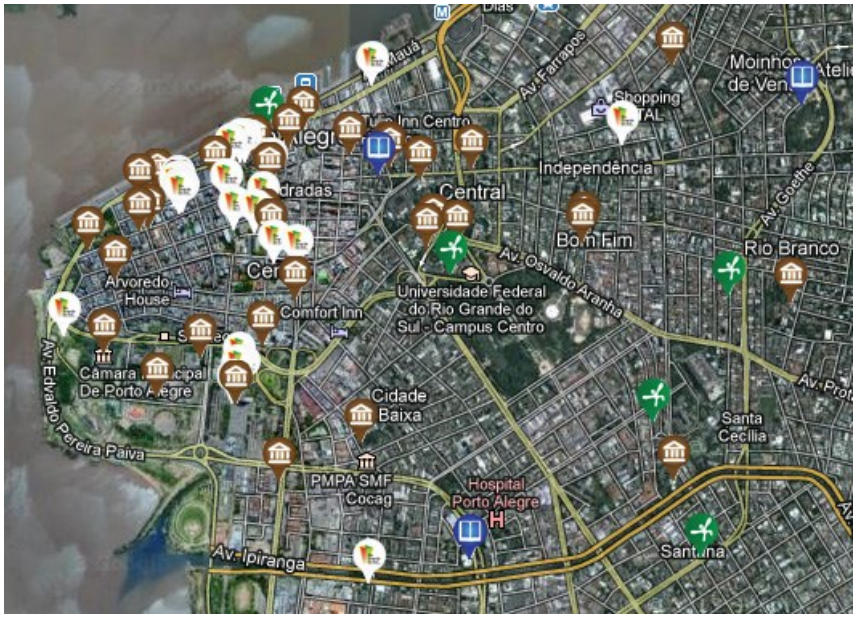

Figure 5. Digital Map of Porto Alegre downtown's culture spots. Source: PROCERGS [23]

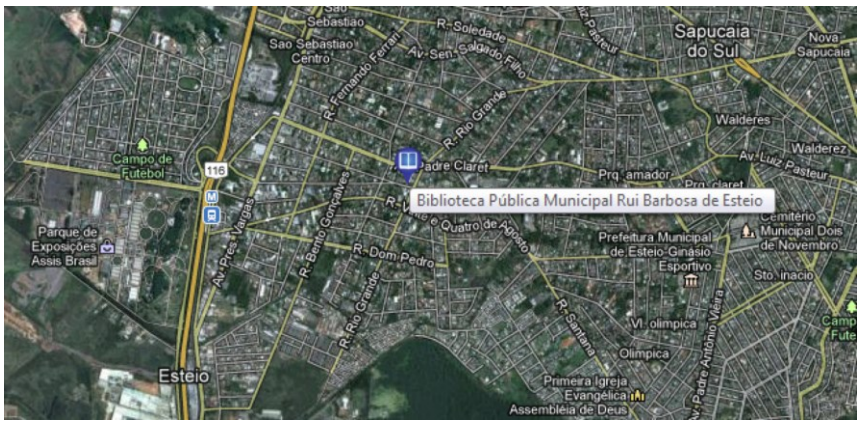

Figure 6. Digital Map of Esteio City's culture spots. Source: PROCERGS[24]

[22] http://www2.cultura.gov.br/culturaviva/ponto-de-cultura/
[23] Obtained at http://bit.ly/17YL9eM

4. Augmented School: the cartography and the reconfiguration of territories

Up to the present time we have traced some of the actions related to the contexts of programs Província de São Pedro (PSP) and Territory of Peace (PTP). At the same time we present our path when mapping, we also bring some theoretical elements defining the cartographic method of research and intervention, and also technological ones such as: Evernote as the instrument working as the field diary, Google Maps for digital geolocation, and the government websites. According to our initial proposal, the idea of building up a referential which is theoretical-methodological and technological has found in the cartographies the suitable epistemological basis to the research we develop. However, the constitution process of both public policies and the creation of PSP and PTP is not limited to digital sources (government websites), which is something that cannot be taken for granted to avoid the risk of mixing up the product with the process. The traces and clues we have followed so far regard more to conceived products and ideas being used in both community and school contexts. It is then important to highlight that the core analysis of this research is not on the process of building up such policies, but in their development within communities and schools. The next step, beyond what was herein developed, is to make the cartography of the places where PTP and PSP are developed in the city of Esteio-RS, including not only political actions but also the actions developed by the residents from those territories. But as a first step it was necessary to map the actions of the policies in order to raise the problem and understand its development within those territories.

By raising the issue, though, we haven't yet clearly identified how and if the actions of the PSP and PTP are converging. The first converging possibility would be the project Paz.Com, but this project is so far applied more to the PTP community actions to the ones related to schools and the PSP. A second possibility was to develop actions related to creating the collaborative cartography based on the platform Digital Map of Culture in RS. This second possibility looks more possible and would assure more autonomy when proposing actions among schools taking part of the PSP. At this point the intervention and participation poles are connected to the cartographic method we haven't so far addressed and which we are currently developing under the scope of the research on Augmented School: digital cartography and mobility for learning and citizenship.

We have previously presented in Figure 6 the Digital Map of Culture in the city of Esteio, taken from PROCERGS collaborative map, where initially only the city library was spotted. However, after the actions of the PTP it was possible to spot several cultural places and associations in the map. Parallel to that the public school Tomé de Souza, among PSP actions, has received notebooks and Internet access, but up to the present time no other actions regarding teachers' training were taken. In order to contribute for the development of both governmental projects wouldn't that be the case to creating conditions for the local community to take over this participation instrument created by PROCERGS? What effects will be risen from the attentive recognition of the territories they live in? Furthermore, will the cartography action mediated by digital technologies reconfigure those territories?

In order to clarify from where we have started and why we have come to the present research let us shed a light in what has motivated us on doing this work.

[24] Obtained at http://bit.ly/12JjYQE

Between the years of 2010 and 2012 we have followed up some of the actions promoted by the Federal Government in the scope of the One Computer per Student and Teacher Program (PROUCA). One of the aspects we can detach as evident in all four schools we have observed was that the mobility expected of the possibilities offered by the mobile device were not fully explored (Lopes & Schlmmer, 2012). The netbooks were extensively used in the same way desktops computers and the Internet is. Lack of web access outside school and distributed around the city can be appointed as one of the factors affecting the referred mobility. Although, even within the school area where the signal could be reached mobility was not considered a key element for transforming pedagogical practices. Based on that, we have elaborated, in 2012, a pilot workshop with the intention to encourage mobile devices' users (smartphones, tablets, netbooks) to see new meanings for online publishing based on the experience of making a cartography of a certain area. This experience has taken into consideration some of the cartographic methods mediated by digital technologies, such as mobility, blogs, digital geographical markers (geotags), and technology of digital reference markers (QRCode). A group of near twenty public school teachers from the State of RS has taken part of the experiment and the results allowed us to consider the possibility to extend and improve the experiment through a research project. Among the results from this project we highlight the change of meaning the teachers attributed to the digital-virtual, who described it as the possibility to "broaden" or "augment" knowledge about the places and objects surrounding us from the possibility to register and publish information on the web and mark them as QRCodes (Lopes and Valentini 2012). In this way the term Augmented School comes from the idea that current technological mobility and possibility allow school to be reconfigured as its boarders are reoriented and receive new meaning from the attentive acknowledgement about the territory they occupy.

> Within the system of nature, man distances himself from the possibility of fulfilling accomplishments with his own piece of land. [...] Right there, where I live, I often do not know where I am. My awareness depends on a multiform flow of information bypassing me or not reaching me, in a way they escape the current countless concrete possibilities of usage or action. [translated by the author.] (Santos 1998, 6)
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> Thus,
>
> The mankind's means of life, and their surrounding, is not what for some decades geographers, sociologists and historians have coined as technical environment. The technical-scientific-informative environment is a geographical environment where the territory necessarily includes science, technology and information. […] the technical-scientific-informational environment is the new face of space and time. […] Groups, institutions, individuals live together but do not perform the same time. The territory is, in fact, a super position of engineering systems differently dated, and nowadays used in different time. The several roads, streets, public areas, are not equally run through by everyone. Each company's or person's rhythm is different. It would be more likely to use the expression temporality than time in here. [translated by the author.] (Santos 1998, 21)

Milton Santos, when shedding light on technique, space and time, have presented us in the 90s with important elements to be taken into consideration about the territory

we live in. Not knowing or not paying attention to the territories we occupy is a mark of the acceleration, and consequently, of the transformation of notion and feeling about the time and space. Such acceleration is usually attributed to technologies and to the way of generating movement they provide, usually lined by the logic globalized consumer markets. The same way the steam engine has generated new measurements regarding time, data microprocessors has been generating new measurements and accelerations. At schools the resistance on using technologies, for a long time and still today, is related to, among other aspects, this process of acceleration and consumer appeals.

Under the scope of our research, we understand that the ways of using technologies, mainly the digital ones, does not necessarily have to be associated to the logic of consume, nor to the acceleration of processes. On the contrary, what we have been proposing through cartography is the deceleration – due to the attentive recognition of differentiated attention regimes – the protagonism and the participation of people embedded in these digital inclusion and citizenship programs being developed in schools and communities. Our objective is basically to deal with the qualities in those processes. This way, besides the rules guiding the cartographic method of research, we understand that it would not be enough for the research being ourselves the ones to carry on the cartographies of those territories where PSP and PTP are developed. The intervention pole of this research is being conceived from the proposition that the subjects themselves (teachers, students and local communities) are capable of taking over this methodology. Besides that, let the digital devices received by them be available for the reconfiguration of their territories, citizenship and the promotion of the expected densification of local cultural practices, instead of mere technological densification – as in the rule of technological saturation that have ruled the discussions about the 1:1 model.

As a way to technological and methodological appropriation, the idea is to propose and discuss, through workshops with administrators and local school communities, the cartographic experience mediated by the available digital technologies – tablets, netbooks, geolocation, QRCodes, blogs, multimedia, social digital media, blended reality, etc. The same way the pilot workshop that inspired this project (Lopes & Valentini, 2012), it is also through workshops that we intend to create an esthetic and/or informative experience for the generation of senses about the place/people/public objects. This way, the experience has the intention to cause double appropriation – technological and symbolic – as the senses produced by the experience of tracing the surroundings is given based on digital media – the locative and mixed reality media, in this case.

In a second moment, after the recognition of territories and the sharing of what have been generated – through blogs and social media, for example – the idea is to propose the participants to carry out the recording of cultural spaces and groups identified within their territory in the Digital Map of Culture in RS. At the same time they mark the identified places on the collaborative digital map, through printed plates with QRCodes (Quick Response Codes[25]) mark their own territory and its physical and digital location. When somebody accesses a QRCode marking a certain spot on the territory, it gets closer to the other's temporality, the one who had been there at another time and who has generated information about oneself and the space around him (an old image, a verse, a fact, a song or noise, an explanation). We understand that the

[25] http://en.wikipedia.org/wiki/QR_code

movement of mapping can, at the same time, cause deceleration, broaden senses and attention towards the territory and, consequently, possibly reconfiguring those spaces.

5. Results

Along the text we have described our own process of tracing government policies regarding to digital inclusion and public security, trying to find the connection between their actions towards the promotion of a culture of peace in the territories marked by violence and criminality.

It was possible to identify that such policies bear in mind that, besides the actions addressed to public security, the densification of spaces for popular participation and citizenship, associated to the fostering of cultural practices and the enhancing of local economies are understood as ways to give new meanings to sociability in the most vulnerable territories. It was possible to perceive that, although having ongoing actions for digital inclusion the PSP does not express clearly what its contribution to address the violence issue would be. In the PTP, on the other hand, it was made evident that digital inclusion is directly related to the communication function of digital technologies in the sense of generating actions to foster protagonism and mediatic autonomy by teenagers living in those territories.

As a way to propose the convergence of PSP and PTP actions we present the cartographic method of research and intervention mediated by digital technologies capable of triggering attentive recognition of the territories from the educational and non educational communities that take part in those projects. Therefore we present our own theoretical, methodological and technical understanding in order to being able to develop, in a participatory way, the research with the theme "Augmented School".

The current technological possibilities (GPS, locative media, cloud computing, among others) allied to participatory methodology and epistemology allows the composition of a promising scenario for the field of ethnographic based researches.

In this sense, the cartography mediated by digital devices emerges as extremely rich methodological possibility as it implies the inclusion of social actors in the context of engagement with local issues and problems. Such engagement would be a necessary condition for the production of meaning through the shared and mediated use of digital technologies in the process of knowledge construction. We believe that this scenario can reconfigure both the research itself and the contract between researchers and subjects, as the action and participation become instances of authorship from which all speak and produce.

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