This text is a result of the research developed by the three authors using cartography for the study of babies\(^1\). From dialogue with Deligny, Deleuze, and Guattari, we present some initial reflections on the challenges of mapping infants. Furthermore, we present some of the produced mappings and discuss the experiences and activities of infants in their daily lives. We also discuss the errancy and the emotions that cross them in the process of producing cartographic research on infants.

The three surveys predicted fieldwork with the accompaniment of nursery classes in three municipalities of the state of São Paulo. Based on this experience, it was possible to formulate records of scenes of babies and their experiences/learning in an educational context, the capture of images and finally, the cartographic experiments. The studies were carried out within the group "BebÊEducação" (Baby Education) and the dialogue with all the participants of the group were also part of our methodology of deepening the studies.

\(^1\) Cited research is part of the FAPESP 2015 / 10731-8 project “Babies and the processes of individuation, subjectivation and singularization lived by them in different spaces”, coordinated by Gabriela Tebet, effective from October 2018 to September 2019. Karolina Barros (BAEF / UNICAMP Scholarship) and Julia Costa's Scientific Initiation (PIBIC - CNPq) scholarship were developed.

DOI: 10.17648/gcyf-2019-99400
https://proceedings.science/p/99400?lang=pt-br
We present the thinking of Fernand Deligny and his work that is always present in investigations and experiences with the children and adolescents labeled as "socially unsuitable" and with "intellectual limitation", passing through their two periods that are marked according to their relationship with institutionality (MATOS, 2017), and we explore some concepts of the author in his work of mapping the movements of the autistic, since these would be "outside" the spectrum of representativity, and this would be the inspiration for using this method with babies.

However, in the Brazilian educational area, the concept of cartography developed by Deligny was not investigated (MATOS, 2017). The cartographic method would be a way of avoiding the over interpretation that makes autistic existence invisible, thus changing the idea of comprehending by tracing, which allows the observation of something previously ignored (PELBART, 2017).

Deligny calls 'errors', 'errancy' or even 'erratic behavior', disinterested acting, one that has no purpose, for they seem unintelligible to the adult. The maps serve to highlight this deviation, showing how the adult can begin to notice the actions of children and improve their relationship with space, highlighting how the child appropriates and reinvents. Thus, Deligny's cartographic method collaborates with the adult's imperfection of understanding the autistic movement (MIGUEL, 2015a), serving to think of space as a facility that can be constantly reinvented.

The research is based on a claim made by Tebet and Abromowicz regarding the specificity of infants in relation to children (Tebet and Abramowicz, 2014, 2018). According to the authors, infants communicate, express themselves and move in singular ways when compared to adults and children, but because they have not developed the abilities of verbal language, babies are at the mercy of adult-centric interpretations. And in this sense, cartography presents a rich perspective, in that it does not assume language as centric.

Following the same train of thought by Oliveira (2016), we present and question cartography as a possibility of a research methodology in the field of education, considering babies as protagonists. The author defined that her research would be an achievement not only about the babies but also with them. In this way, cartography

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seeks a way for them to be participants and agents of the research. Thus, she directed her work to the cartographic methodology.

In our research, after obtaining the authorization for its realization, we went through a period of adaptation in relation to the dynamics of the institutions and in relation to the babies and their educators. Only after some time, is it possible that - in all three cases - we can begin the realization of mapping. However, throughout this process, we faced several questions, doubts and anxieties. The strategies that we used for the accomplishment of the mapping were also diverse.

Some of the main challenges we faced were the creation of the symbols, the definition of what should be looked at and what should be transcribed in the cartographic records, the size and elements that should appear in our base maps and even if whether they were always important. The duration of the period that would be recorded was also important, since our records referred to scenes ranging in length from less than 1 minute to a 4-hour period in which the researchers stayed in the daycare center.

Some of the strategies used were trying and testing the use of different colors to represent different babies, the identification of different babies by numbers, the use of colors to imply a territory, a field of intensity and emotion or to indicate a network, an agency, the use of different transparency sheets to represent the passage of time when elements of the scene were added to already existing elements, and the use of comic strips when there was no need to maintain elements of the previous moment. We also experienced the observation of a single baby, more than one baby, a set of babies in a class during a short period, and a set of babies for a longer period.

These different strategies can be observed in the following mappings:
*Cartography produced by Costa (2018) regarding the assemblages and territorializations created by a baby in the leisure area of the nursery (lawn) during a period of 45 seconds.
Cartography produced by Tebet (2017) regarding the movement of the babies in a nursery room during a period of 10 minutes (between 8:30 AM and 8:40 PM)

**Figure 3**

Key – 18th April
** Breakfast
** Music time
** Light table experience and exploration of the entrance
** Free interaction with various objects
** Hygiene time
** Another music time
** Lunch
** Relaxation/Nap time

* Cartography produced by Barros (2018) regarding the use of nursery spaces by infants over a period of 4 hours.

** Figure 4 **

** KEY **

- : Baby (1 and 2)
- : Crouching baby
- : Standing baby
- : Bowl
- : Balls
- : Grabbing balls
- : Screaming baby
- : Baby holding the ball
- : Baby walking
- : Ball being thrown
- : Gaze direction
- : Turned over bowl

DOI: 10.17648/gcyf-2019-99400
https://proceedings.science/p/99400?lang=pt-br
Figure 4 - Cartography produced by Barros (2018) concerning two babies interacting with a bowl filled with balls.

Working with the cartography on the babies gave us several challenges, part of which is the exploration of our perceptions, discourses and treatment of infants, as well as the investigation of a relatively new method, questioning its viability, limits and potentialities. It was clear, throughout the development of the research, that there was a significant change in our gaze towards the baby (ies). At the beginning of the project, the observation focused more on scenes and collective situations. During the course the focus of the visits, readings, discussions in the group "BebÊEEducação"(BabyAndEducation) and the cartography work, went from being errant lines of the babies and those produced to having a relation with us in the networks and territories they created.

Therefore, we perceived the potential of causing a shift and in how we look at and, consequently, in the treatment of infants, as well as of the space and its various elements. The research points out, through the exploration and questioning of the cartographic method, that it is possible to give movement and representation to the actions of the babies, seeking to escape adult-centric interpretations. It is necessary, however, to consider recording what makes us think, which affects us. Therefore, this process is not neutral and it is necessary to consider the influences that the presence of the researcher can cause, in order to minimize them.

Cartography allows us to revisit the moment of the scene several times for the construction of a map. This movement makes us practice a more sensitive look at the relationships and emotions that occur in the daily life of the day care center. It becomes interesting to look at the micro-politics in relationships, and allow us to be attentive to issues that may go unnoticed in everyday life. Therefore, cartography has shown us a way of being with babies while still respecting their particularities of being.

The cartographic method and the study of babies still have a large space to be occupied, it is necessary to overcome the insecurities barrier in mapping the intensities and small reactions of the babies, with the intention of exploring the cartography and...
the possibilities that it allows as a methodology. This can collaborate, for example, to illustrate processes of singularization, individuation, and territorialization, but also in helping to understand such concepts. One issue, which has been shown to be pertinent throughout the present work, is the perspective of thinking and constructing a kind of pattern of symbols and representations in order to assist future research, as well as to give researchers security.

The research demonstrated that the cartographic experiments collaborate to "adjust" the adult's look at the actions of the babies and their forms of language and can be considered an important strategy in the training of professionals to act with babies. The elaboration of the maps allowed us to register and to give movement to the scenes without "talking" through the babies' intentions. This contributed to the field of "Study of babies" which is still under construction, and also to the daily work of educators and educators with babies.

Starting from the question, "What are the experiences and stimuli that are provided to them?". We saw that between eating, sleeping, and hygiene, babies not only "wait" but also are constantly interact with everything. Within this perspective, we could perceive the importance of the objects available to daycare centers, because they contribute in large part to the relations and assemblages. According to Latour (2012), objects act alongside humans, do not determine action, but allow it to occur. Therefore, our mappings show that objects play a major role in the relationships that infants establish in daycare centers, and they appear in mappings as acting beings.

Babies territorialize space in different ways than adults. They discover new ways of being and relating at all times. With this, they are always creating new territories that allow for experiences.

Thus, the totality of components in the nursery space can become an element of the babies' experience in their various potentialities, and it is vital that the space is intentionally planned based on the encounters and affects that can be provided.

References:


