

THINKING GEOGRAPHICALLY IN EARLY CHILDHOOD EDUCATION: FROM IMAGINATION TO THE SOCIAL CONSTRUCTION OF CONCEIVED SPACE

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The constructivist tradition relates the way to understanding the space that students have with their physic and psychic development according of their age. But this approach does not explain clearly enough the causes by which pre-school children are able to represent places have never been or demonstrate territorial relationships of some complexity. That is why we have addressed a case study with five year old students where we show indications that allow to evidence that the use of their imagination on the construction of the conceived space can be enhanced by experiences and educational resources such as the classroom projects and stories.

INTRODUCTION

The dialectic between constructivist and socioconstructivist approaches face to geographical space in early childhood education educational treatment. From the first approach, authors such as Piaget and Inhelder (1947) and Hannoun (1977) defend the spatial conception is carried out depending on the age of people, so it up to more mature stages you could beat the lived space phase. But with the socioconstructivist paradigm developed initially by Thurstone (1938) or Vygotsky (1962) takes relevant the experiences of the students. With this social approach we have found interesting to dig into the learning of the geographical area based on the subjective space (Boira, 2005).

The social construction of geographical space was defended by the Geography in the perception and behavior school in the 1960's. Kevin Lynch (1960) was one of its pioneers,

and after the explanation of the rotation of the behavior by Horacio Capel (1973), other Spanish researchers have addressed the educational treatment of geographical space (Boira, Reques and Souto, 1994). Progressively it has been recognizing the existence of spatial thinking and its translation recent within the scope of management of the territory, as it has been captured in the perceptual approaches of the European Landscape Convention (European Council, 2000). The classic concepts of landscape, place and territory acquire a meaning more dynamic and interactive with the treatment of social representations and their recognition using techniques such as pictorial representations.

Mental representations are an essential element in the learning of children (Tonucci 1993, 1995), and together with the strengthening of strategies of fantasy and imagination (Egan, 2007) are useful for understanding the geographical space in Child education. For this reason we have asked the following: is it possible to think geographically in early childhood education? A similar question arose in a Final work of Master by Estefanía Donet (2016) with historical thinking, that we have taken some theoretical approaches that have led us to carry out a pilot study in a Rural Grouped School of Valencia with five students. Pictorial representations of the near and distant space around three categories have been worked: “place where they live”, “a very far away place” and “them / as in a place very far away”. The intervention of one of the autors has been the reading of a story to the third representation. The interpretation of drawings has undergone a trial of experts to help discover the keys to geographical thinking and categorization of the represented space. Therefore, the objectives of this research are the following:

1. Analyse the pictorial representations of next and distant spaces made by students of second cycle of early childhood education to determine the places represented.
2. Highlight the keys of geographic thought in pictorial representations.
3. Categorize the spaces represented according to the tripartite concept: lived space, perceived space and conceived space.
4. Innovate in the use of teaching resources for the understanding of the geographical space.

THEORETICAL AND METHODOLOGICAL FRAMEWORK

To answer the posed research question, is necessary to explain theoretically the problem and draw a method to guide us in the search for a solution. The main question suggests that ask for the school of geographical thought which allows us to address the teaching and learning of the geographical space in early childhood education. Input, geography is not an independent and separate stage of child discipline, but his contribution to the development of child personality through its integration with the environment in which he lives justifies the development of spatial thinking (Tonda,

2009). Wool Souza Cavalcanti (2017) points out the scientific character of the geography allows to understand the social reality in spatial terms from classical concepts like place (lived space), landscape (social perception) and territory (conceived space).

To achieve the development of a social geography is required the inclusion of experiences, emotions, images and experiences of students can be studied from socioconstructivist thesis that applied to the learning of the geographical space require a necessary relationship between the geography of perception and behavior along with the social representations theory (Souto and Garcia Monteagudo, 2016). This means that the generation of spatial knowledge is the responsibility of the individual although learning is generated at the heart of a social and cultural community. That is why we are defending a subjective perception of space that requires a teaching that takes as a starting point the diversity of prior concepts that can be explored through the understanding of social representations.

Spatial perception acts as a filter between of the individual experiences and the conceived space, so the social and cultural context conditions the learning space. The influence of external sources (travel, media, conversations...) already was designated by Goodey (1973) as agents that help to generate an image of the world since childhood. The combination of experiences helps children to form a social representation of distant spaces far away from their immediate reality. However, we cannot challenge the methodical principle of teaching of how close to the distant, because we agree with Perez and Souto (1989) which then must work spaces farther away from the immediate reality of boys and girls.

Although the syncretic thinking prevents the clear distinction between “the near” and “far”, Nadal (1999) says that spatial perception in the first ages generalizes the places that are not “here” with spaces close to his city and others that may be to hundreds of kilometers. For this reason we have searched our theoretical justification in new currents of geographical thought that exceed the constructivist approaches. Piagetiana conception limits the spatial learning to preoperative Stadium (2-7 years) and Thurstone (1938) opened the first interpretations on the spatial references from the body of children. This was explained by Hannoun (1977) from three successive phases: lived space (direct experience of the child by his body and movement), perceived space (distances and positions between objects) and conceived space, which would coincide with the Euclidean Piaget space. Although currently the social perception influences the emotions and vice versa, so the passage between the stages of the lived space and the perceived space occurs in two senses.

Contrary to the constructivist thesis, neuroscience has shown that spatial knowledge it strats before to the entry of children into the school. Those previous mindsets are changing with educational activities and the experience of students (Rivero and Gil,

2011), so it is now necessary to “reflect on the social character of the space”. The learning environment in Early childhood education encompasses different sources of information both of average real (family,...) as virtual (internet, social networks...), then the empowerment of the multiple intelligences of Gardner (2005) must allow the development of capabilities that favour social integration and citizenship for these children to be inserted in the global society.

In the social construction that the individuals realize of the objects that they perceive from the reception of various information (beliefs, traditions, values, opinions...) and that they share in a social group of reference they are generating social representations. Social representations is a theory created in 1978 by Serge Moscovici who sought to realize the kind of mental and symbolic production present knowledge of common sense. They are a guide that helps individuals to learn and interpret the world, as well as to organize their conduct and forms of communication (Andrade & Moreira, 2017).

Among students of early childhood education, mental creations will go linked to pictorial representations as the medium where can reflect them (Barraza, 1999), as well as to have a strong visual character that expands with the influence of the technologies that children begin to use intuitively before starting their schooling. Therefore, we agree with wool Souza Cavalcanti (2017) that the inclusion of alternative languages (poetry, music, digital games...) allows the learning of the categories of perceived and conceived space. If we consider the capacity of fantasy and imagination in learning sciences (Egan, 2007), pictorial representations will be a useful tool in learning space in school geography.

With this theoretical development we have developed a study of cases with a qualitative approach in a group of eight students of second cycle of early childhood education (five years) of one school in the province of Valencia: CRA Riu Vernissa (Almiserà and Llocnou de Sant Jeroni). Then a panel of University experts in geographical discipline contributed to interpretation and categorization of pictorial representations. Unlike the first part which evolved into schools with one of us direct intervention, the other party took place at a seminar on the teaching School of the University of Valencia.

The experience in the school consisted of three duly differentiated parts. During the initial phase (I) each student at drew the place where they live and then a very far away place (phase II). In later sessions, the researcher developed the phase of intervention in which students narrated the tale to them the story of *Fent un tomb pel món, Caterina i l'Ós* (Pieper, 2000), in which the adventures are related of two friends who traveled the world. In the synthesis phase each student at drew himself in a very distant place. While each child made his drawing, the researcher asked about what had wanted to represent.

After the collection of pictorial representations, the data were subjected to a judgement of experts in a two-hour session attended by researchers related to the

teaching of social sciences of the University of Valencia and the Pedagogical University of Bogota (Colombia). Each expert stuffed two complementary pieces: the first reflected the understanding of spatial relationships from the simple to the complex (eat, 2002) and the second related basic concepts (place, landscape and territory) that define thought geographical (Cavalcanti, 2017) with the tripartite categorization of Hannoun (1977): lived, perceived and conceived space.

ANALYSIS AND DISCUSSION OF RESULTS

The interpretation of pictorial representations of students has focused on the understanding of the evolution of the represented sites, the emergence of basic elements that define the geographical thought (place, landscape and territory) and categorization represented spaces (lived, perceived and conceived space). So the researcher information has been complementing with the knowledge of experts. The experts were professors from the University of Valencia and the Pedagogical University of Bogotá, as well as students of the Teaching Degree in Early Childhood Education of the first university.

Students has clearly differentiated between the next spaces and the distant. In the first case they have represented the town in which they reside as a known space in which people do not appear. Representing “a place very, very, but very far away” have been based on the classroom project on Egypt (Africa), on trips that have made (Granada, mountain areas, London and Marina d’Or) and media (representation of a football match in Rome). In the representation of the farthest place in which they appear have been used experiences and trips (mountains and England), the project of classroom (Egypt) and the story used by the researcher in the phase of intervention (India and Everest). This evolution of the represented sites is consistent with Comes (2002) and the social construction of space defending Rivero and Gil (2011) with the help of appropriate teaching resources that encourage the capabilities of fantasy and imagination.

Geographical thinking and its most outstanding elements that experts have identified reveal that any of the three categories (place, landscape and territory) is identified in close environments both in the farthest. The school construction of geographical thought focuses on places who live and know, those who know and remember, as well as those who are unaware but conceived through his imagination. The perceived landscapes are natural spaces experienced and perceived, but also social, cultural, and imaginary scenarios. The knowledge of the territory suggests to make visible the relationships that exist in the same, the complex interaction between physical and social, local and global or the relationship between the elements that make up the own

neighborhood. This conception of the territory from a subjective perception approach linked to the approach of the European Landscape Convention (European Council, 2000), which includes aspects related to identity and emotions. Thus means that the Territories represented are significant for students and are identified with them, especially when it comes to next territories. But when they are in places far away accompanied by their families have been drawn to feel safe in those unknown spaces.

With the experts judgment provided to us the categorization of spaces represented by students of early childhood education according to the basic concepts of geographical thought (place, landscape and territory) and the tripartite classification of Hannoun (1977): lived, perceived and conceived space. Some drawings do not have been able to be categorized by experts without knowing the explanation of students of early childhood education. The categorization of spaces experienced and perceived interrelate with the concepts of place and landscape although it does not correspond with the idea of proximity or nearness of the constructivist thesis. Designed space have linked you with the territory, but from the perspective of the subjective space because they have interpreted the relations of identity and emotions that help students to build a “common space” (Rivero and Gil, 2011:41) coherent from a point of view sustainable and solidarity.

In terms of teaching resources is observed that the next place drawings are influenced mainly by the ordinariness of their home, their town or street; farthest place drawings are by the project of Egypt and travel experiences or television; While drawings from very distant places students receive the influence of the educational project but also creativity and imagination spurred by the reading of the story during the intervention phase. Therefore working with various resources (stories, songs, videos, images...) helps promote capabilities that enable the development of geographical thought during the first years of childhood. This is consistent with the proposal of Egan (2007) when points out that promoting strategies of fantasy and imagination are important to develop capabilities which in this case study have proved useful to conceive and build a social space in which the boys and girls can participate in a full-fledged citizenship.

CONCLUSIONS

While this research suffers from the limitations of a case study we have revealed a series of indications that show that the students of second cycle of pre-school education are capable of developing geographical thought. Below we show the most relevant conclusions here:

- The evolution of the spatial understanding in the stage of early childhood education responds to the social construction of space from the experiences made by the

children. The children used their imagination to understand and conceive the most complex spaces. They distinguish clearly the next of the distant according to their experiences and perceptions, which are also capable of representing them / themselves / as in a space where they have never been.

- In pictorial representations have reflected the place, the landscape and the territory, both in environments next and others further afield. The construction of such geographical thinking part of their own experiences and the resources they have at their disposal to represent places that know and remember, and those who are unaware and conceive by your imagination.
- Own experience and imagination have allowed them represent space lived, perceived and conceived as a social construct, where concepts that require great ability of abstraction have been reflected: identity, emotions, relations between the local and global, and territoriality.
- Teaching resources (projects of classroom, stories and other activities) enhance the imagination that helps them to conceive space and enhance your subjective space.
- The use of these educational resources as didactic-evaluative models that allow the participation of students of early childhood education in the construction of the geographic space encourages a correct interpretation of what the children know so that the teachers will help to connect the subjective spaces with the absolute space.