
Mapping as a Medium and Tool for Spatial Education – An Examination with Visual Methods

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Abstract:

In my research I explore the didactic use of mappings in the context of spatial education for children and young adults and examine how cognitive maps and cooperative mappings can foster interpersonal communication about space.

The formation of spatial consciousness is mainly developed through spatial action and by socialisation processes in adolescence (Löw, 2001). During this time, when many hours a day are spent at school, children and young adults experience fragmented and delimited spaces as they grow up with digital communication media in a globalized world. Space is understood as a construction process permanently redefined by the individual. As everyone perceives the built environment differently communication becomes important. The interpersonal exchange of experienced spatial realities is a prerequisite for social interaction and political participation.

In science multilayered and relational spatial models are already common sense. Nevertheless the complex spatial constructions of cityscapes have so far received little attention in the educational program of schools and the spatial competences of children and young adults are not addressed sufficiently. This gap could be bridged by the exploration of mapping as a multidisciplinary tool for education.

In my ongoing dissertation “Atlas of Invisible Spaces. Mapping as a medium and tool for spatial education” I provide insights to mapping as a multi-perspective didactic concept for spatial learning and pursue the goal to show that children and young adults have a lot of unappreciated spatial competences. In my research I relate to the work of the urban planner and researcher Kevin Lynch, who put forward the question how to influence environmental images by education (Lynch, 1960). Building up on his method of cognitive mapping I develop special mapping protocols which can be used as media and tool for spatial education as a part of Built Environment Education (BEE).

From observations during my longtime BEE practice I developed two research-settings which were realized as case studies in different Viennese schools in collaboration with a team of co-researchers and teachers. In the first setting the kids were asked to produce a sketch map describing their daily path to school. In the second setting they were undertaking exploratory walks in the school environment to collect data for thematic maps. The artefacts produced by the schoolkids in these settings are called “individual path description” and “cooperative theme map”. The former makes implicit knowledge explicit and the latter produces a sort of collective ethnographic rendering of the school environment.

In the course of my paper I focus on the visual analysis of sketch maps as means of communication about space: Is there a common communicative signature in hand drawn maps? Which places of orientation are addressed? How can cooperative mapping support didactic processes? To find out how hand drawn maps made by children communicate and how they reflect implicit spatial knowledge this material is questioned with a combination of ethnographic and visual methods. To deal with the special features of the visual language of cognitive maps of children and young adults I inquire about children's drawing research and semiotics. These findings are combined with strategies based on the qualitative social research method of documentary image analysis (Bohnsack, 2021).

In my contribution will give insights into the process how I developed my own analytical tools based on the empirical material of three case studies and show results of this interpretation.

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