

The Method of the Socio-Spatial Map for the Reconstruction of Transformative Educational Processes in Educational Contexts

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Abstract: This article is concerned with the method of the socio-spatial map. It is a method that combines visual (sketches/drawings) with verbal expressions (interviews) in a triangulating manner. This process is particularly suited to empirical questions and analyses of *educational contexts, processes* and *strategies* within the framework of extended education, as they are too complex to be captured solely by a single method. Rather, educational processes require a methodical-methodological design that enables as holistic a reconstruction as possible, within the mode of language and visualization, fundamental dispositions, experiences and forms of processing (cf. Maschke, 2019).

Keywords: triangulating methodology on space, educational research on space, arts-informed research, documentary method

The Socio-Spatial Map

Characteristics of the Socio-Spatial Map

On the basis of the narrative map, an instrument used in narrative and visual social research in ethnographic orientation (Behnken & Zinnecker, 2010), we made modifications aimed at creating a *common* methodological basis for analysis (cf. Bohnsack, Michel & Przyborski, 2015, p. 20). In order to do so, the triangulating components of the narrative map – the verbal and visual components – were linked by means of the documentary method (Maschke & Hentschke, 2017). To emphasize the extended expressive possibilities and the interactivity between both methods (interviews and sketches/drawings) and the socio-spatial aspect of the map, we no longer speak of a narrative map, but rather of a *socio-spatial map*. This method has, on the one hand, a certain similarity to arts-informed research (Guruge et al., 2015, p. 1); this is a data collection method that combines “drawing activity” with “focus group discussions”. On the other hand, it is similar to narrative mapping (Thomson, 2019, p. 132) as “a form of visual storytelling” or “mental sketch mapping” (Giesecking, 2013, p. 712).

The socio-spatial perspective focuses on the social creation and appropriation of space and habitus. The tenets are (1) that spaces are constructed interactively. They are constituted “in the interaction between action and structures” (Löw, 2017, p. 191). Actors create spaces,

and in turn, the space also has an effect on them (cf. Hummrich, 2011). In addition (2), the effect of different and also divergent experiential spaces for the creation of habitus is significant. Taken together (3), the interactively generated social (and at the same time, spatial) action practices (cf. Hummrich, 2011) can be taken into account on this basis. In this way, educational processes or (reflective) educational moments can be identified (cf. Maschke, 2013).

Implementing the Socio-Spatial Map

Like the narrative map, the socio-spatial map combines the graphical element of the drawing with the narrative (also guided) interview. Initially, an introduction impulse, adjusted to topic and age, is given, with which the respondents are invited to make a drawing/sketch of their personal space, e.g. of growing up during childhood or adolescence, or on specific transitions, with biographically relevant experiential spaces, stages, encounters, situations, events etc., and to talk (in parallel) about what seems significant to them. The entire process is recorded; any open questions are noted down for the subsequent interview phase. The first phase ends when the drawing is complete in the view of the respondent. This is followed by a follow-up question section and, if required, by a guided interview, which incorporates new content (cf. Behnken & Zinnecker, 2010). Individual parts/elements are then explained and/or evaluated by the respondents using standardized signs (e.g. plus or minus signs); for this, a transparent sheet can be laid on top of the sketch, or they can use a specially-colored pen to add something directly. The implementation of the socio-spatial map takes between approx. 30 minutes and one and a half hours.

Theoretical Background

Transformative Educational Processes

By connecting it to the concept of the subjective education space (in the tradition of socio-spatial analysis, *inter alia*, Kessl & Reutlinger, 2007; Deinet, 2009), the socio-spatial map can determine the habitual conditions of educational acquisition. Here, we refer back to the education-theoretical work on transformative educational processes (*inter alia*, Marotzki, 1990; Koller, 2010; Maschke, 2013; Nohl, Rosenberg & Thomsen, 2015). An international connection is produced via approaches of transformative learning (e.g. Kasworm & Bowles, 2012). In essence, these studies state that the transformation of the habitus arises from new *educational experiences*, which create a 'tension' in the current habitus (Maschke, 2013). The perception and release of this tension takes place within the self-reflective awareness or also the (self-)realization of biographical aspects – in our case with a view to the use and management of educational programs.

In both theoretical as well as methodological terms, the socio-spatial map draws triangulating research attention to cognitive-linguistic forms of expression in an interview as well as to a performative aspect, which finds its physical expression in the drawing/sketch (cf. Maschke, 2013). As such, the spectrum of possibilities of expression expands across a holistic approach, "room for the whole person-feelings as well as thoughts, body and soul, as well as mind" (Schapiro, Wasserman & Gallegos, 2012, p. 358-359) – which is particularly important for international comparative research. Though it hasn't been applied in in-

ternational comparative research yet, we suggest the application of our method for the analysis of subjective educational space.

The Documentary Method and the Socio-Spatial Map

An empirical perspective that has so far received scant attention is the holistic and qualitative perspective of extended education, which addresses the reconstruction of transformative educational processes or their blocking.

The documentary method refers to a method in reconstructive social research (cf. Bohnsack, 2003). This includes “the practice of action as well as that of speaking, performing and debating” (ibid., p. 42). In addition to the interpretative aspect, this practice includes the “*practical* production and construction of the world” (Bohnsack 2009, p. 17). The comparative analysis direction is also of great significance, i.e. the “controlled operation with empirical comparison ranges or comparative cases” (Bohnsack, Michel & Przyborski 2015, p. 11). Reconstructive research is aimed at the reconstruction of (constructed) everyday actions of social actors – and thus also on the underlying “implicit” or even “silent” (Bohnsack 2009, p. 15) knowledge of the research subjects.

The aim of triangulation within the framework of the documentary method is to contribute to the consolidation of results (cf. Maschke & Schittenhelm, 2005). This can be achieved when the different methodological approaches relate to “the *same* object” (Bohnsack, Michel & Przyborski, 2015, p. 19). Both image and text interpretation can be taken equally as a basis without blurring the specific inherent logic of image and text.

The Narrative Interview

The interview stage within the method of the socio-spatial map follows on from the carrying out and analysis of the narrative interview. The documentary method is also applied in “modified form” in the interpretation of the narrative interview (Bohnsack, 2003, p. 134). ‘Access’ within the narrative interview is “individualizing”, i.e. it relates to a biography-theoretical framework as well as to a collective one, by relating autobiographical narratives to process structures of one’s life, institutional sequence patterns and collective trajectories. We assume a familiarity with the stages of the interpretation of interviews (with the documentary methods, cf. Maschke & Schittenhelm, 2005) and focus more strongly on the application of picture analysis.

Picture Analysis

Within the framework of the documentary method, the work stages of the interpretation of pictures involves a differentiation between *immanent* and *documentary meaning*, and the resulting differentiation of *formulating* and *reflective* interpretation (cf. Bohnsack, Michel & Przyborski, 2015). Formulating interpretation enquires about the immanent meaning, it asks *what* is presented in the picture (cf. Bohnsack, 2003), or “WHAT is being drawn” (Wopfner, 2008, p. 167). The differentiation is made in the pre-iconographic dimension: what can be recognized in the picture that comes from the material world?, and the iconographic dimension: which social

scenes can be identified in the picture? (cf. Przyborski, 2018). The reflective interpretation is concerned with the documentary meaning, it asks about the how of the production of the picture, about “HOW the drawing is made” (Wopfner, 2008, p. 167). This refers to the “reconstruction of the formal structure” (Bohnsack, Michel & Przyborski, 2015, p. 22). The aim is to capture the “formal construction of the picture across the surface”, namely by means of a “seeing view”, which opens up the “inherent meaning” of the picture (Bohnsack, 2006, p. 54). This includes: the “planimetric composition”, whose reconstruction makes the “cohesion or disintegration of the composition across the surface” (Przyborski 2018, p. 158) visible, and works in particular with the use of lines. Furthermore, the “perspective projection” (Przyborski 2018, p. 158), which classifies the “depicted representationalism in its presented space” and thus expresses the “world view” (Przyborski 2018, p. 158) by carving out the utilized perspective, as well as the “scenic choreography” (Przyborski 2018, p. 158-159). The aim is to “make the balance, symmetry or tension, the constellations as relationships from top to bottom, near and far, related and segregated, from individual and groups of people or from people and objects visible in the picture” (Przyborski 2018, p.158). The conclusive iconological-iconic interpretation refers to the picture as a “constructed whole” (Pilarczyk & Mietzner, 2005, p. 141) and, ideally, takes into account all possible “ways of reading” a picture.

The key question with a view to drawings/sketches is what is documented by the drawing/sketch about the research participants and their conjunctive experiential *spaces*. Overall, the sketches (and interviews) show “centers” (Maschke, 2019), which are both an individual-biographical and collective expression at the same time – because every form of communication, including an “inner dialogue”, assumes a “generalized other” (Bohnsack 2003, p. 116). They are characterized by particular detail or even differentiation, interactive (spatial) density, graphic emphasis, delimitation and directional determination by means of lines etc., and metaphorical content (cf. Nohl, 2006).

Research Example

It should be noted that the documentary method is comparative, though only one example is described here. In addition, we will limit the example to a summarized interpretation due to space limitations.

Brief profile¹

The young adult, 22 years old at the time of the interview, is a first-year student of architecture at an institute, has siblings, and grew up in a city with approx. 30,000 inhabitants,

1 The West African republic of The Gambia has a population of approx. 2.1 million (2017) (Munzinger, 2019). According to the country report of the European Asylum Office (EASO) 60 % of the population is younger than 25 years. Youth unemployment in The Gambia of the youth aged 15-24 was more than 44 % and about 91 % of this age group had had no vocational training in 2012. Many young people especially from poorer families leave school early, and almost 25 % of the youth under 20 had had no schooling at all (2013). Alltrogge (2018) talks about a huge lack of income and educational prospects. The national development plan of the Gambian government states: “the issue of quality and relevance of the curriculum and learning materials continues to be a source of serious concern” (Republic of The Gambia 2018, p. 5). Therefore, many parents prefer to send their children to private schools with school fees, as the quality there is much better. Children may also be enrolled at Early Childhood Development Centres for two or three years before starting primary school. These Centres are mostly private institutions with fees to pay.

where he still lives today. His father is from a Ghanaian migrant background, Wolof as well as English are spoken at home, the parents' academic qualifications are not known. The interview partner attended a 6-year private elementary school in The Gambia. The educational center consists of an early childhood development center, a basic school, an integrated health project, a youth program and a particular focus on life skills. It is located in a deprived neighborhood of N., has a radical priority for poor children and is free of charge. It offers numerous programs in the area of extended education, e.g. computer courses, health education and summer schools. In addition, the pupils receive a free lunch. In the following, we present our empirical procedure.



Figure 1. Socio-Spatial Map of X.

The picture evokes a picture book that reads from left to right. The eight situations and stages appear to be organized sequentially and at the same time as self-contained narratives. Seven of the individual pictures have titles, some of which are emphasized by underlining. One title is especially emphasized with the use of capital letters: “FROM [...] To [...]”. Some pictures have additional explanations and definitions. The irregular distribution of the space is noticeable, which centers each third picture from the right, in particular the term “Transportation” in the lower level, and an upright person on the upper level.

Iconological-Iconic Interpretation

The impulse² is geared towards the balancing of the time at elementary school and the transition to secondary school, perhaps even to tertiary education. As a result, we would expect retrospective information on the time at elementary school, the transitions to upper basic school, high school and a further transition to college. Although the participant was already a first-year student, the drawing shows a clear orientation towards the past, which relates almost exclusively to the first six school years at elementary school. Only his excellent school leaving qualification after 12th grade, with which he returns back to his first school to present it, is portrayed. By contrast, the transition to college is missing; a transfer to the present or the future does not take place. The clear outer lines of the drawing outline a (familiar) interior that is limited in time and space, and at the same time refer to an (unfamiliar) exterior. Gaps (also visible in the patchiness or incomplete lines of the lower level) indicate that the participant is in a self-contained life situation or episode that he is not (yet) able to leave of his own accord. This would require the genesis of forward-looking biographical plans or a new action strategy.

Interpretation of a Key Interview Excerpt

In the interview, he describes the transition to upper basic school – which is only possible with the help of the school management and due to the ongoing cover of school fees –, and the second transition to high school, where he discovers his talent for technical drawing. However, he repeatedly refers back to his past, which illustrates his attachment to it. His answer to the question of whether he is someone who likes to learn, is:

“I want to (...). To become a big architecture. I don't want my education to end just like that (.). It's just like, **I want to become somebody in the future.** I one thing (...) like (.), I don't know, but I want just to support my dad. Supporting someone to a certain stage and forget about the person-. It might be the person can't continue, so that support will become useless (.) that's what I'm saying. You can't support me up to grade nine, the high [inc.]. I'm grateful. I'm always grateful to [Name of the School], but you can't support me up to grade nine and say 'Okay, this is where we can stop'. If I also drop out from school, the support becomes useless, you see? So I don't know if [Name of the School] can still help me to catch up my dreams in the future. I want to be an architecture and at this moment, at this time it is a very difficult time for me, very, very difficult time, I'm just coping.”

Here, his future life plans become clear: The respondent clearly expresses that he wants to become “a big architecture”; the desire not to leave his training incomplete is key. He connects positive experiences of the past – financial and emotional support experienced at elementary school – with the possibility of future failure, should he fail to cope with current challenges on his own. His inner conflict becomes clear when he realizes that he was supported up to a certain point, but was then “forgotten”, which may lead to a failure of promising educational prospects. Although he expresses his gratitude for the support he experienced, he also has ambivalent feelings between insecurity and hope in the transition from the familiar into the unknown. He is facing his own decisions in a “very difficult time”.

2 “You have been at [...] until grade 6 and are now at another school (or finished school). Please tell and draw everything that has been important to you since you started school: Situations, people, or places, also successes and difficulties.”

When asked why the present is difficult for him, he refers to the transportation problems from his home to his place of study that continue to exist, which is already indicated in the drawings, and to financial difficulties in paying his study fees, which he hopes to solve with the help of financial support from his employed brother.

As a reflection center in the triangulation of drawing and interview, “Transportation” can be understood figuratively as transfer efforts, the wrestling with the transition to an independent life. It is not the transition to another school or college that represents the challenging, tense situation here, but rather the arising insecurity about his further course of education after leaving elementary school (from a protected/supported to an unprotected space). A further reflection center can be seen in the drawings of disproportionately large people: a self-portrait of the respondent as a graduate with his eyes lowered and a backward-facing body posture remaining in the institutionally pre-structured space of the school. He only constructs his own space in the interview, indicating the cognitive-reflective engagement with present and future challenges, which so far have only been implemented in part in the action practice of (self-)liberation from the challenging social and biographical circumstances. On the one hand, he addresses conflicting feelings of powerlessness, such as frustration and having been forgotten, which turn into accusations. On the other hand, he is aware that his own efforts are required to shape the successful transitions into the second year of study and into the working world.

Conclusion

It can be argued that the perspective of the socio-spatial map opens up a broad spectrum of analysis and interpretation. It is suitable for the reconstruction of subjective educational spaces and temporal-spatial reflections of transitions by offering a multi-perspective focus on transition problems. In the present example, individual educational efforts become apparent, which have certainly led to a transformation within the context of elementary school, in the sense of a change in self and world relations, key educational orientation (“To become a big architecture”), his own self-efficacy etc. On the other hand, he faces structural hurdles in the form of a lack of educational *progression* in The Gambia. For example, if we discuss the extension of training periods and further education programs in Germany, this leads to an expansion of transitions that lose their “linear character” and become increasingly “complex” (Stauber, 2007, p. 131). In the example from The Gambia, there is also an expansion and complexity of transition, though under very different conditions: the first successful educational stage does not consequently or automatically lead to further extended options in institutionalized education and choice. Rather, the open-ended transition in our example is experienced as separation and isolation, dependent on the complete biographical responsibility of the individual, in terms of the outcome of both possible success or failure. On the basis of the example presented, we have shown that free extended education reduces social inequality by enabling the individual to develop successful strategies for action, despite a weak socio-economic background, which is shown here in the transition to secondary education, high school, and university. However, due to a lack of opportunities in The Gambia to progress, these strategies are not sufficient to cope with the multiple transitions –

into the working world, into society – without adequate economic capital to finance fee-based extended education.

In Educational Science the development of a theoretical perspective and empirical research is desired, with which it can be asked for the educational potential of societal and especially pedagogical space relations in view to the interwoven power-and-subjection practices (cf. Nügel 2016). Our method of the socio-spatial map is especially suitable for research in extended education with its different institutional settings. Children and adolescents make various socialisation experiences in the different social spaces of school and extended education offers, which can be visualized by the unique potential of the socio-spatial map. For example, children could be asked about their reason or future aspirations for participation in extended education. In a second step, the method can be used in the frame of longitudinal surveys in order to show the personal development of the participants.

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