

## Maker Cultures, Code and Publicness - Exploring (Post-)Digital Spheres and Practices

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The digital age accompanied by what is often called a digital revolution (Heffernan 2011) presents researchers of all disciplines including the educational sciences with new phenomena and challenges to the established methodological approaches. Under the banner of Digital Humanities (Berry 2012) researchers try to incorporate what we know about digital media and the digital mediality in modern methodological concepts to enable research that includes specific digital media phenomena, analysis of digital or virtual data (Marotzki, Holze & Verständig 2013) and takes place in public forms of virtual communities (see Rheingold 1994) or social network sites (Ellison & boyd 2007). Against this background, boundaries of social phenomena become blurred as online and offline spheres are increasingly mingling (Jordan 2009). In the context of digital change, privacy and the public are no longer two distinct areas. Actors move in semi-public arenas, are confronted by (or produce) new forms of (in)visibility and change between different socio-cultural spheres. Participation in certain situations is not determined by physical presence but can be understood as mediated, whereby advanced technologies enable new forms of simultaneity and spatial delimitation (e.g. in the form of live streaming or distributed collaboration).

Ethnography can be understood as one crucial research method to open up sociocultural contexts to research and is an attempt to understand those phenomena by actively observing and partaking in them, reconstructing meaning from specific artifacts close to the actual actors in such an environment. The symposium wants to address these outlined phenomena by discussing new ways of self-expression that can be observed in *digital spheres*, *maker cultures* and *codeworks*.

### 1) Methodological implications of different approaches for ethnography online

The first contribution attempts to conceptualize ethnographic research in a digital age by revisiting earlier works and reworking an approach of the structural online ethnography (see Marotzki 2003). Therefore, this presentation looks into a selection of methodological theories on ethnography to specifically point out the challenges of digital media that are addressed and to represent the progress that has been made. Between the concepts of netnography (see Kozinets 2010), cyber- or virtual ethnography (see Coleman 2010) and elements of structural online ethnography, the common goals and foundations are laid out. This is done in order to create a coherent updated methodological framework compatible with the concept of *Strukturelle Medienbildung*, an ongoing theoretical and methodological project at the Otto-von-Guericke-University in Magdeburg, and thereby serves to extend previous works on that project (see Jörissen & Marotzki 2009; Jörissen 2010).

## 2) Discursivity and digital materiality. Methodological notes on socio-medial constellations

Against the background of the project “Making, Fabbing, Hacking - New forms of subjectivation in the context of post-digital media cultures”, the presentation deals with methodological aspects of the ethnographic exploration of material-discursive practices (Barad 2003). Makerspaces and FabLabs are places where people experiment and tinker with a variety of digital and analog technologies (Walter-Herrmann & Büching 2013). At the same time, they are often characterized by a specific ‘ethos of world improvement’ that seeks to respond to societal problems (Baier et al. 2013).

The presentation is based on the assumption that artifacts, practices and discourses are temporally and spatially protruding into as well as reach out of ethnographical situations. Their interconnectedness constitutes the phenomenon as a complex and heterogeneous network of activities, materialities, corporeality and power structures. Thus, traditional notions of the public and the private sphere have to be questioned, causing methodological issues. The presentation discusses possibilities of a constellational analysis following the investigation of discursive practices (Wrana 2012). In doing so, it refers to works that emanate from a distributed agency in socio-media connections (Rammert 2006) and focus on the materiality of digital artifacts (Passoth 2017).

## 3) Coding Publics and Code as Ethnographic Artefact

The third contribution to this symposium will discuss the meaning of source code, software and codeworks by focussing on *coding publics* (see Cox & McLean 2013). Considering publics that emerge from code and collective action, this approach offers insights to both a reconceptualization of publicness in the digital age and the discussion of methodical and methodological challenges by asking the question how to address code as ethnographic artefact (see Seaver 2017). Software is deeply woven into contemporary life - economically, culturally, creatively, politically - in manners both obvious and nearly invisible, therefore a better understanding of coding practices and social negotiations as initially observed by Brunton and Coleman (2014) can give rich insights for educational science.

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