

A TIME AND PLACE FOR EVERYTHING?

Social Visualisation Tools and Critical Literacies

Veronica Johansson

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Faculty examiner: Dr. J. Anne Beaulieu,
University of Groningen, the Netherlands

The Swedish School of Library and Information Science
The University of Borås



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The aim of this study is to analyse mutual enactments of critical literacies and social visualisation tools as information resources. The central concept of critical literacies as used here extends and redefines prior critical literacy definitions to denote the pluralistic situated enactments of meaning through which study participants identify, question and transform bias, restrictions and power related aspects of access, control and use in relation to the tools.

The study is based on two critical ethnography inspired case studies involving observations, interviews, and contextual inquiry and located in professional settings. Case 1 is centred on how a geographic information system (MapInfo) is used for analysing and preventing traffic accidents. Case 2 is centred on how a dynamic time series animating chart (Trendalyzer) is used for analysing and spreading knowledge about the world's development.

The results demonstrate co-existing critical literacies described in terms of three main directionalities as *reactive*, *proactive*, and *adaptive*, of which the adaptive varieties seem thus far largely overlooked. On the basis of these findings, it is suggested that dominant cognitivist and positivist narratives of visualisations should be replaced with more nuanced alternatives that emphasise the potentials of visualisation tools as *evocative* and *non-blackboxed* information resources; i.e., as encouraging new questions and allowing alternative analyses, rather than constructing them as enunciative tools providing true answers.

As theoretical contributions, the dissertation argues for a conceptualisation of visualisation tools as representational artefacts and a species of documents actuating information organisation related problems of representation. It also presents a new theoretical construct for the analysis and understanding of the mutual shaping of critical literacies and information resources that includes both cultural practices and actor interests through a combination of sociocultural theories on tools and socio-technical theories on inscriptions.

Keywords: critical literacy; document perspective; enactments of meaning; geographic information systems (GIS); ICT; information activities; inscriptions; interaction; library and information science (LIS); representation; social data; social visualisation tools; sociocultural perspective