deRSE25 and SE25 Timetables



Contribution ID: 110 Type: Talk (15min + 5min)

Supporting the lifecycle of place-based data

Thursday 27 February 2025 09:40 (20 minutes)

Places as main access to everyday environments (Cresswell 2004) are no fixed entities, but are in a constant change. Practice theory (Schatzki 2002) describes how places are composed of social and material arrangements influencing how people interact with them and alter them according to their needs. How people read places depends on and number of factors including their current need and their socio-cultural background (Cresswell 2004). Place-based information can thus help in a number of contexts to transcend 2D cartography by intermixing it with multi-modal data (images, audio, video, text) representing different perspectives on space: (1) how do platial storytellings differ according to different biographies? (3) What do place-based media reveal about social discourse, e.g. by the interpretation of urban street art in digital literature and media studies?

Qualitative GIS (Schuurman 2006, Kwan 2002) and place-based GIS approaches (Purves et al. 2019, Gao et al. 2023, Kremer 2018) involving multi-modal geo-data (text, images, audio, videos) capturing the very moment of making sense of place are well established. Yet, collecting and providing high quality place-based data for specific research questions put an ongoing challenge to the domain of research software development. Which arrangements do visitors actually refer to on site? What photos and audios do they choose to frame their view? How do they feel about those places? Following Critical Data Studies (Dalton/Thatcher 2014), those rich data sets even help to reveal underrepresented perspectives and act as counter-data (Kitchin/Lauriault 2014) contrasting normative or scientific views from nowhere (Jasanoff, 2017).

Integrating the whole workflow cycle of (1) data collection, (2) data screening and (3) data presentation, I report on first experiences developing a suite of applications addressing those challenges. (1) The mobile app SpaceLog (Kremer et al. 2023) allows for recording multi-modal place-based data on site and thus digitises established workflows of accompanied walks and think-aloud protocols (Degen/Rose 2012). It can act as (a) survey tool observing individual spatial behaviour as well as (b) a research diary. (2) Utilising the category system of SpaceLog as filter, I show how the exploration of rich data sets can be assisted by an integrated dashboard allowing for early explorative data analysis. This resembles the earlier, qualitative comparative analysis of multi-modal place-based data (Psenner 2004). (3) Utilising the app GeoExplorer (Kremer/Wagner 2023, Verstegen/Kremer 2023), I show how place-based data can be used to stage digitally assisted excursions or public trails by (a) presenting place-related media ranging from photo and audio to AR experiences in a web-based mobile application. (b) To involve different stakeholder groups already at the stage of content creation (Glasze/Pütz/Weber 2021), we also provide a web-based input form guiding the users through the process of creating place-related experiences for their respective target groups.

I report on initial success stories of supporting the lifecycle of working with place-based, individual data from different research disciplines, including health geographies, social studies, educational partners and digital archaeology.

I want to participate in the youngRSE prize

no

Primary author: KREMER, Dominik (Friedrich-Alexander-Universität Erlangen-Nürnberg)

Presenter: KREMER, Dominik (Friedrich-Alexander-Universität Erlangen-Nürnberg)

Session Classification: Research Software in Digital Humanities

Track Classification: Research Software: digital humanities