

MAPPING LOCAL FUTURES

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In my dissertation project in Science & Technology Studies at the DFG-Graduate School Locating Media at the University of Siegen, I investigate the visioning of local climate change futures. My research addresses the question how algorithm-based knowledge about climate change impacts gets situated and visualized, when it leaves the realm of climate science and enter other social and political fields such as planning, decision making and education.

Climate change is often described as one of the greatest challenges of humankind in the 21st century. Under these circumstances, research institutes conduct massive simulations in order to gain knowledge about the climate system and the future with climate change. In this context, modelers of such scenarios have been described as the new prophets of our time. Twenty years ago, these simulations calculated abstract, physical interdependencies and changes on a global scale. However today, they are also able to make statements about concrete, situated changes and risks such as drought, sea level rise, and natural hazards. Simulations also increasingly leave the realm of numbers and become visual. In the course of this localization, concretization and visualization, this knowledge about probable futures becomes actionable for planning and decision-making and imprints itself in our culture.

I analyze this process of situating futures with a focus on digital geo-platforms that visualize sea level rise, which are also known as flood maps. Examples include simple Google Maps mashups as well as comprehensive platforms for decision-making such as NOAA's Digital Coast. These platforms show spatial changes that are (assumed) to occur with future sea level rise, some of them including not only flooding and physical destruction, but also social and political variables (e.g. migration, adaptation measures). For my analysis, I use visual analysis and ethnographic methods that enable the investigation of the construction and use of climate impact mappings. With regard to theory, I rely on literature from Science and Technology Studies, Software Studies and Cultural Geography. So far, the concepts of immutable mobiles by Bruno Latour as well as Susan L. Stars boundary objects have proven to be useful for the description of the phenomena.

Simon Hirsbrunner is PhD candidate and lecturer at the University of Siegen. He holds a M.A. in European Media Studies from the University of Potsdam and a M.A. in International Relations from the Graduate Institute of International and Development Studies in Geneva. In the context of his doctoral research, Simon is currently a visiting scientist at the Potsdam Institute for Climate Impact Research (PIK). Recent Publication: Adriázola, P.; Carius, A.; Tänzler, D.; Comardicea, I; Hirsbrunner, S.; Maas, A.: Climate Diplomacy – Reducing Risks for Security. Studie im Auftrag des Auswärtigen Amtes. Berlin: adelphi 2012.