

Session Cross-cutting: April 11th 13.45 hrs

5s1: Visions for circularity: critical exploration of the implementation of the concept of a circular society

Seeing the Visual: A Literature Review and Agenda for the Study of Influential Visualizations

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Visualizations increasingly influence policies and politics on complex topics, like technological innovations and transitions. But how? Based on a quantitative and qualitative Social Network Analysis (SNA) of 77 academic papers in policy and political science journals, we identified five explanatory roles of visuals: 1) sensemaking devices for interpreting complex information; 2) emotional triggers to strategically manipulate the viewers' sentiments and emotions for political gains; 3) objects of political meaning-making; 4) visual language with structures of symbols and signifiers 5) icons that convey social and cultural norms. An application of these five roles on an online visualization of the controversial gene-editing technology CRISPR-Cas in food demonstrates that these five roles need to be combined to better understand how visualizations are influential over time and for different groups of policy actors. Based on that, we argue that visualizations should be studied as boundary objects of which the meaning is negotiated between groups of policy actors and can change over time.

Keywords: Visualizations, Policy, Political Behavior, Social Network Analysis