STS-HUB Conference 2023 | CIRCULATIONS Human Technology Center Aachen | 15.03. – 17.03.2023

CALL FOR ABSTRACTS: Regulating socio-material flows - A sustainability perspective

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In the sustainability discourse, one popular approach to environmental problems is the management of material flows in cycles to reduce waste of resources (water, nutrients). This entails transforming conventional production systems from linear conceptions of material flows (resource to product and finally to waste and emissions that are at the heart of sustainability problems) to circular conceptions (cradle to cradle). To transform material flows, it is important to look at the practices, infrastructures and law they are embedded in. For example, hydro-social flows bring water from source to tap, from sewers to treatment plants, from points of discharge to waterbodies. These flows similarly entail changing forms of valuing water - as a resource, as entitlement (human right to water), as waste and as ecosystem. In the case of plastic packaging, practices of consumption (e.g. buying, opening and emptying packaging) are connected to the socio-material transformation of the plastic packaging from being a valued and functional object in the shelf to being a disturbing and problematized waste in the bin. Importantly, these connections between materials and meanings are not fixed and predefined; rather practices of reuse or upcycle show that flows of devaluation can be interrupted or inverted. Practices around reusing materials involve contestations over meanings in and ways of valuing materialities. It prompts us to think sociomaterial flows unfolding across scales and places (from the individual to the global). From a socialecological perspective, a main issue of socio-material flows is their sustainable regulation. We consider practices, infrastructures and law as intertwined factors shaping and regulating socio-material flows, by limiting and/or enabling certain kinds of flows. Examples of social-ecological regulation of hydro-social flows include property rights, technical design of water supply systems, and discourses on the human right to water. Bringing together dynamic socio-material flows and statutory regulation is a paradox because the latter works through static categorizations. For example, the socio-material flow of municipal sewage water to fertilizer passes several legal frameworks in Germany, which use legal categorizations of the material that are incongruent with the actual biophysical state. The legal term sewage sludge means waste at the end of sewage treatment, while the actual material characteristics differ widely. In this session, we want to identify the problems emerging from the regulation of sociomaterial flows and discuss governance approaches that make space for sustainability transformation. We furthermore intend to tease out what conceiving resources in circulation rather than flows adds to understanding and regulating them sustainably.

Submission of abstracts:

Contributions can be theoretical or empirical in nature and could respond or relate to one (or more) of the following questions: How do (everyday) practices, infrastructures and law manifest in the circulatory interaction of socio-material flows? How do these manifestations contribute to regulating and managing socio-material flows? How can a sustainable and dynamic regulation of socio-material flows take shape?

We call for abstracts that conceptualise circulations and socio-material flows and their regulation in studying societal relations to nature. Please send your abstract (**300 words**) and a short biographical note until **17.10.2022** to **Dženeta Hodžić** (<u>dzeneta.hodzic@isoe.de</u>). We encourage applications from early-career researchers, underrepresented communities and inter-/transdisciplinary research settings.

About the STS Hub conference:

Circulation is one of the key organising principles of present-day societies, but at the same time constitutes contested dynamics. We call for empirical studies and critical reflections on the circulation of research objects, knowledge, instruments, experts, and skills in technoscientific configurations. Contributions could approach circulation with familiar STS sensitising concepts, such as infrastructure, translation, power, and care. So, let's circulate! https://sts-hub.de/panels/CallForSpecialTopicPanelsSTS-hub.de2023.pdf