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Debating the anthropogenic water cycle – The destination of rain water

This presentation will focus on the development of a new approach in urban water management and here especially on rain water. Niche development and niche cumulation will be introduced as theoretical concepts to offer a possible interpretation of the development process.

In the 1970s, urban water management saw a debate emerge over the destination of rain water, an issue that had previously been "settled". Since the diffusion of systematic water supply and sanitation systems this topic had been stabilised: On the one hand ground water became the predominant source for water supply, and for instance using rain water was marginalised. On the other hand run-off rain water was discharged with other types of used water and labelled as "waste water". As a result of the "formation period" this approach is embedded and materialised in a dominant socio-technical system and led to stabilisation and momentum.

I will argue that – apart from existing scientific communities, organisational structures etc. – the question on the destination of rain water has been destabilised. It became possible for different actor groups to intervene in the debate and to introduce / apply their specific interpretations of problematic circumstances as well as expectations of future developments. Throughout a "re-formation period" niches for development processes were useful and necessary. Herein new relations between actor groups and social and technical elements as well as socio-technical systems that "work" have been set up and tested. Rain water may have served in this period as a "boundary object" providing assistance to find and establish new relations.