## Abstract

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## Environment's Many Faces – on Air and Water Quality Monitoring and Organizing in Stockholm

This thesis shows how the environment becomes a part of a city and one of the ways the city is organised. The city in focus is Stockholm, often marketed as a "Clean City" because of its fresh air and pure water. The perspective applied to study the city is constructionist, that is, it is based on an assumption that there is no point in dividing reality into "nature" and "culture". Therefore "the environment" is seen simultaneously as a thing – the physical environment – and as ideas, or various ways of apprehending and interpreting the physical environment.

Air and water are important aspects of every city. A historical overview reveals a long tradition of monitoring water quality in Stockholm that originated several hundred years ago. Such monitoring resulted from a wish to deliver healthy drinking water. Air monitoring came later, becoming a matter of routine only in the 1960s. The thesis shows how, at present, air and water are translated into figures and illustrations, according to the notions of air quality and water quality.

The particular focus of this thesis is on collective actions related to environmental issues, and the ways these actions are connected to each other. Thus, the chosen way to depict organising, necessary to and resulting from the fact that the air and water are measured and reports created and used, is by following "action nets".

As it turns out, the monitoring consists of an uninterrupted chain of humans and non-humans (including e.g. the air). This study of air and water quality in Stockholm shows that the instruments are of great importance in the creation of such chains. Instruments permit creation of inscriptions, and there are serious advantages in inscribing the air and water into figures, graphs etc.

The calculations and illustrations of the measured data play a significant part in the creation of reports. As these reports circulate, they become "boundary objects" (i.e. objects permitting different actors to collaborate) and black boxes (i.e. objects whose insides are unknown and unquestioned). This thesis shows how this is possible. The paths the reports take reveal similarities between various social worlds and practices, but also differences between them, especially in the ways the content of the reports are transformed in different situations. The thesis includes several examples of how facts and figures can be used and be part of many actions undertaken in various practices constituting city management.

Key words: action-net, organising, city management, environment, boundary objects, inscription, institution, translation

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