

4: Critical Innovation: Methods and Design for Initiating Change

Architecture and Urbanism Beyond Oil: Designing the transition in Rotterdam and Dunkerque

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Abstract

Design matters. Historically, architects and urbanist have created the spaces of oil and the imaginary that goes with it. Today, the same professionals can foster more critical thinking, dreaming, and curiosity as they imagine and design the necessary new spaces, forms of urbanity, buildings, and transitions for a period ‘beyond oil.’ Educational institutions have an important role to play in developing new ideas. Our built environment has been shaped by and for the flow of petroleum (oil) and its products, and by and for its financial flow as well. The resulting *global petroleumscape* (Hein, *The Beam*)[\[1\]](#) of industrial sites, transportation infrastructure, business districts, gasoline stations, cars, refineries, and ports, is the manifestation of the omnipresence of oil and our dependency on it. In addition to supplying oil, the petrochemical and building industry collectively developed a huge range of new synthetic and hybrid materials and building elements: from plastic bathroom units to electric cable insulation, from insulation material to plastic windows, from furniture to domestic appliances and toys. These materials and products enthused designers and users alike and have since become standard. The (positive) feedback loop between the global petroleumscape and the way in which it has been represented has influenced the minds of citizens in their everyday life.

A courtroom made of ice: where theatre and social science intersects

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Abstract

In October 2016, the environmental organizations Greenpeace and Nature and Youth announced that they are taking the Norwegian government to court for unconstitutionally allowing new oil exploration in the Barents Sea. The proceedings will take place in Oslo District Court this year, and have already been the subject of research papers, policy discussions and media debate. Much less attention is paid to what petroleum development will mean to the Arctic communities most directly affected – whatever the outcome in the courts. What role, if any, can the social sciences play to open such discussions?

During the art festival Barents Spektakel in Kirkenes, I worked as researcher and assistant director on the performance *Trial of the Century*, directed by the artist Morten Traavik. It staged the legal proceedings as a Public Tribunal, explicitly aiming to offer people in the Barents Region the possibility to give their own verdict as audience members and jury. In a courtroom made of ice, key witnesses from politics, academia, environmental activists and law professionals were invited to fairly represent both sides of this important and difficult dilemma. The verdict made the front page of the regional newspaper and was a hot topic of conversation locally.

This presentation will outline the methods and ethics of staging a piece that was simultaneously a public space event, research communication, further research and an agent in public debate, and discuss how this can be a productive – but also potentially risky – way to facilitate public deliberation on futures with and beyond oil.

Design Thinking, from theory to practice

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Abstract

In Bergen, Norway, a multidisciplinary education in Design Thinking was established in 2015 by the Department of Design at the Faculty of Fine Art, Music and Design (University of Bergen), NHH Norwegian School of Economics and Western Norway University of Applied Sciences. In the program, which is the first of its kind in Norway, designers, economists and engineers collaborate on solving real, complex problems for the industry and the public. Design Thinking is “a practical, human-centered, prototype-driven methodology for innovation that tackles organizational challenges in creative ways.”¹ The design-thinking process begins with gaining empathy for the user and ends with the real-world implementation of products services, processes, experiences and/or systems. In this paper we will describe Design Thinking as a strategy to deal with complexity and social and environmental challenges.