Transtructures
Prototyping transitional practices for the design of postindustrial infrastructures

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Abstract
This dissertation is about ‘transtructures’, a term coined to describe new kinds of infrastructures that are more attentive and responsive to the needs of contemporary society, its emerging economies and technological capabilities. The purpose of this inquiry is to begin to explore the character and possibilities of a design practice that could guide responsibly and ethically the transition of existing industrial infrastructures towards these new configurations: what processes it could follow, and what materials it could include. Through a series of design experiments in the areas of logistics and telecommunications, I started to prototype and develop a programmatic framework for a ‘redirective’ design practice, which is aimed at engaging publics with infrastructural issues. Design probes and speculative mockups have been employed to express and materialize present and future infrastructural configurations, opening them up to public scrutiny and participation. The premise of this work is fairly simple: if we want to provide more citizen-centered solutions to emerging social demands, we need to explore what changes are possible, and even required, within the industrial systems that currently frame our possibilities for implementing such innovations. Thus, certain design interventions will be necessary to allow people outside these systems to understand and relate to these networks and to identify possibilities for their transformation. The result of this inquiry is the early ‘prototype’ of what a practice for redirecting and transitioning towards the design of such postindustrial infrastructures could be like. In particular, it exemplifies how design may inquire into the artificial space of industrial infrastructures and explore opportunities for their reconfiguration toward more contextually adaptive forms and functions.

Keywords
Infrastructures, transition design, postindustrial design, system design, drones, participation, design practices, automation, hacking, logistic, telecommunications.