## Determinism, Cybernetics and Co-Design: Smart Cities and even smarter citizens

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"Every technology and every ensemble of technologies encodes a hypothesis about human behaviour, and the smart city is no different." (Greenfield, 2013).

Designers and planners cannot avoid having models of human behaviour. When, however, we step into the area of *explicitly trying to influence people's actions* through the design of the built environment, and entangled political and technological systems, we come up against questions about stakeholders' intent—does it matter? Or are the *effects on behaviour* more important, regardless of the intent involved? What happens when people don't behave how the designers planned? How is that plan communicated or revealed to the public? Would actually *involving the public in the design process* be a more humane approach to behaviour change than blindly applying the latest pop-behavioural economics bestseller?

This presentation explores—through examples from design for behaviour change—some treatments of design and intentionality from a variety of fields with emphasis on systems in the built environment. A cybernetic perspective, drawing on Beer's (1974) 'The purpose of a system is what it does' and more recent framings of behaviour-focused design (Dubberly & Pangaro, 2007), is introduced and considered in tandem with a people-centred design and co-creation process, with project examples around energy use, community engagement in neighbourhood planning processes, and particularly the notion of the 'Smart City' and what that could mean in relation to design for behaviour change. Implications for designers working on behaviour-related problems in the built environment are extracted, and recommendations made for engaging the public in better understanding of complex everyday systems.

Beer, S (1974) Designing Freedom. Wiley, London

Dubberly, H, & Pangaro, P (2007) Cybernetics and service-craft: Language for behavior-focused design. *Kybernetes* 36(9), 1301-1317.

Greenfield, A (2013) Against the smart city. Do Projects, New York, NY

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