



## Chapter X

# Sociotechnical Spaces: Guiding Politics, Staging Design

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### Abstract

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*The chapter addresses how insights from the social shaping tradition and political process theory may contribute to an understanding of the sociotechnical design and implementation of change. This idea is pursued through the notion of “sociotechnical spaces” and its delineation, with respect to the analysis of two distinct cases, namely, business process reengineering (BPR) and magnetic resonance imaging (MRI) in the light of “film-less” radiological practice, respectively. The chapter elaborates on sociotechnical space as being an occasioning as well as a result of sociotechnical choices and processes and points to how socio-material and discursive practices may render such spaces open to problematisation and action. It is suggested that the notion of sociotechnical spaces helps generate a sensitising guide for researchers and practitioners and, thus, may serve as a constructive means with which to localise potential political concerns in processes of change. This chapter tentatively points to some analytical implications and to challenges and possibilities for the “bridging” between spaces, which may otherwise be rendered analytically distinct.*

## Introduction

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This chapter draws on recent concepts developed within the social shaping of technology (SST) tradition (Sørensen & Williams, 2002), combined with a political process analysis approach, and captured together in the notion of “sociotechnical spaces.” A sociotechnical space for shaping implies a socio-material and discursive context (rather than a physical space alone) where sociotechnical ensembles can be analysed, addressed, and politicised (Clausen & Koch, 1999). “Space” is mainly an *occasioning* as well as a *result* of sociotechnical processes—taken to be heterogeneous processes of translation and displacement—in which social players interact with one another and with technological artefacts and programs for change.

The particular configuration of a space includes and sustains some actors, their agendas, and particular frameworks of action within it, while leaving others excluded. While the emergence and constitution of sociotechnical spaces are in no way to be taken as a priori givens, an analysis facilitated through the “spaces” notion may encompass any a priori demarcations, which some actors and their practices render as givens: this may include, for example, conceptions as to what is to be deemed (distinctly) social vis-à-vis technical in both problematisation and approaches to management and coordination. This chapter underscores such realities in its treatment of spaces and the selectivity they thereby manifest—a selectivity which the notion bears open to analysis. The authors believe this to be a particularly-pertinent challenge to organisational setups and concrete undertakings in sociotechnical change, interaction, and development.

Sociotechnical space is by no means intended as a well-delineated tool, but rather a sensitising concept. One implication of its approach is a greater attention towards the relational nature of what (and how) areas may be delimited vis-à-vis rendered open to negotiation and transformation. This may deal with technological design, implementation, and change processes, including the characterisation of the very artefacts or instruments involved or otherwise implicated in such change. This is particularly important from the vantage point of recognising the multiplicity in the complex of diverging set of issues, agendas, and practices that may be involved in the course of such processes of change.

The concept should help sensitise practitioners and analysts alike to these political dimensions and, in this sense, serve as a reference and guidance for sociotechnical action.<sup>1</sup> It should point to areas where reflexive approaches concerning involvement in “spacing” and “staging” of design activities and change processes might be helpful: these include the creation, configuration, and reconfiguration of actors and actants, the definition and redefinition of boundaries, and the bridging of diverse spaces as processes of translation and network building. A crucial dimension in design is the idea of differentiation, whether certain actors or aspects inevitably come to be included or excluded in the design process, and how problems and interests are mediated

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