

**Shaping Urban Infrastructures: Intermediaries and the Governance of Socio-Technical Networks.** Simon Guy, Simon Marvin, Will Medd and Timothy Moss (eds). Earthscan: London & Washington DC, 2011, 240 pages, ISBN 978-1-84971-068-8. £65.00 (Hardback).

The inspiration for this book is taken from Simon Guy, Simon Marvin and Timothy Moss' 2001 edited collection *Urban Infrastructure in Transition: Networks, Buildings, Plans* in which the authors explored how reconfigurations in governance exposed opportunities for wider environmental innovation across Europe. The volume under review extends and deepens the scope of analysis in order to chart how particular understandings of the "sustainable city" are produced and how specific logics emerge to (re)shape social relations. More concretely, the book contributes to existing research through its detailed analysis of a wide range of "intermediaries" and their potential role in reshaping urban governance.

The book is particularly well structured, an introduction at the beginning of each of its three parts establishes the research questions which are to be explored and each individual chapter clearly outlines its specific objectives. There is always a danger in an edited edition that the finished product can resemble a disjointed collection of essays. However, this book avoids any such problem; explicit reference to moments of synergy and disjuncture with other chapters ensures that the book maintains a high level of internal coherence throughout. Moreover, the way in which many of the chapters detail their methodologies is illuminating for the aspiring researcher; Whittle and Medd's description of their use of flood diaries in Chapter 12 is a prime example.

In terms of content, the opening introduction of the book provides a clear conceptualization of an intermediary and a short literature review on urban infrastructures in transition in order to develop a convincing rationale for the need to map the role of these actors more closely. Here, intermediaries are deemed important because they provide a window through which to view

broader processes of shifting urban governance; they act in-between traditional actors in urban governance; and are potentially vital actors for pursuing EU and national policy objectives, for example furthering stakeholder participation and meeting environmental standards.

In their conceptualization of intermediaries the editors critically engage with Actor Network Theory. Specifically, the editors adopt Latourian notions of hybridity, relationality, agency and translation. However, Guy et al. distinguish their approach from Latour's brand of Science and Technology Studies in two ways. For Latour, intermediaries are of little political significance, they only transport a "social factor". Therefore, he argues that 'everything important is *in the factor*, not in the intermediaries' (Latour, 2005: 105). In contrast, mediators appear interesting because they 'transform, translate, distort, and modify the meaning or the elements they are supposed to carry' (Latour, 2005:39). Guy et al. retain aspects of Latour's analysis but, importantly, they imbue intermediaries with the transformative function Latour reserves for mediators alone. They argue that the term intermediary more accurately depicts the actors that operate *in-between* the traditional governance triad of provider-user-consumer. Secondly, they stress that intermediaries cannot be assumed to be neutral facilitators; rather they possess agency and strategic interests. This comes out especially well in Chapter 8 with Randles and Mander's exploration of "dark" intermediaries in the tourist industry. Here, the authors assert that some intermediaries actively seek to prevent particular changes to the existing socio-technical network where they profess an interest in the retention of the status quo. Therefore, the editors are able to investigate the bodies which govern socio-technical urban processes without losing sight of the the power structures which permeate the social relations in which they are embedded. As a result the editors avoid one of the core criticisms of ANT; that it fails to take difference and power seriously (for an excellent overview of some of the perceived problems with ANT see Kirsch and Mitchell 2004; Castree, 2002). Indeed, one of the book's main strengths is how it unveils the "hidden" intermediaries and their role in shaping urban governance.

The remainder of the book is divided into three sections. The first is comprised of three chapters which together develop a conceptual framework for understanding the role of intermediaries in (re)shaping urban governance. Three themes are explored in this first section: governance of infrastructure (Moss); system transition and innovation (Van Lente et al); and urban governance and politics (Hodson and Marvin). The following section critically explores the role of intermediaries in reordering actor relations during the ongoing process of network transition through an impressive range of sector specific empirical case studies in Europe. The final part of the book works through the transformative potential and limits to intermediaries and explores the processes of intermediation between the different scales of governance. Many of the chapters have been adapted from material already available in a variety of peer reviewed journals. As a result several of the sections may appear familiar to some readers yet the book is certainly no weaker as a result. The chapters have been sufficiently reworked and skillfully woven into the completed form to bring together a rich array of empirical case studies. An extensive range of socio-technical networks are covered from electricity, water supply, wastewater, aviation, building regulations to flood management. The balance of case studies works well and whilst investigation into the role of intermediaries in places outside of Europe - specifically in the global South - would have been welcome in this collection, the scope of the book is already ambitious so it would perhaps be better to suggest that this book opens up avenues for new, potentially fecund, research agendas.

The book concludes with seven key findings: that intermediaries develop as responses to privatization, fragmentation and pressures for change; that more energy ought to be channeled into making the hidden work of intermediaries visible; intermediaries can be transformative; there are limits to intermediaries; attention needs to be given to the “darker side” of intermediation; the study of intermediaries can illuminate broader societal processes; and place is an important theme. Subsequently, the book

culminates in recommendations for future research which helps to 'construct frameworks in which intermediaries can help reshape infrastructure networks along more sustainable lines' (p. 217). Here, if I were to make one slight criticism it would be that while the book makes very detailed and careful analysis of the ways in which intermediaries may be considered transformative, there is little development of what a more sustainable, transformed, social-technical network might look like. Nonetheless it is clear that *Shaping Urban Infrastructures: Intermediaries and the Governance of Socio-technical Networks* makes an extremely valuable contribution to the study of change within urban socio-technical networks. This topical book will undoubtedly become essential reading for both undergraduate and post-graduate students, practitioners and policymakers alike. For this reason it is a shame that currently, at the time of writing, the book is only available in hardback. I imagine a more affordable paperback version will be eagerly anticipated.

### References

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