The latest book by Juval Portugali is a comprehensive volume covering the key themes and outputs of his recent work. The book covers a wide range of material related to methods of understanding and modelling the city. It is split across four sections: 1. The Cultures of Cities, 2. Complexity, Cognition and the City, 3. Complexity, Cognition and Planning, 4. Complexity, Cognition and Urban Simulation Models. The quantitative methods described bring together cultural, informational and spatial understandings of cities, and the book seeks to outline the way in which cities function in regards to human cognition.

The book opens with Snow's thesis\(^1\) regarding the divide between the two cultures of the arts/humanities on the one hand - and the sciences on the other. This is then related to how different readings of urban form have arisen through this disciplinary separation and how complexity theory has the potential to reconcile these divergent conceptualisations. Whilst this is not new material, the subsequent chapters are where the new strands of thought are woven into the body of work – centring on the role of cognition. The human subject is presented as a cognitive being who seeks to understand the city, and through this process create the city. This conceptualisation is developed in relation to how the informational content can be read back from an analysis of urban complexity.

Portugali suggests that urban and regional planning are an important example of a domain that suffers from the quantitative/qualitative split that underpins Snow's thesis. Planning - together with its philosophical and theoretical approaches - is discussed at length in relation to complexity theories of cities and human cognition. This usefully grounds the theoretical discussion of the city in a practical example of how people and the state engage in the production of urban forms.

The final chapter of the book discusses the modelling of the processes that are described in the preceding sections. It focuses upon the SIRN (Synergetic Inter-Representation Networks) model of urban processes, described in section 2 of the book and applied here as a method of modelling the way that the city functions and grows through its informational structure and the cognition of those who inhabit the city. Whilst this final section describes a highly specialised form of modelling – one which is possibly of more limited interest to the general reader – or indeed to the space syntax practitioner, the contents of the book as a whole are likely to be of great interest. A wide range of material is covered and concisely tied together in a lucid and clear manner. At times it is complex and mathematically based, but nevertheless, the book has a lot to offer to those seeking to understand what a city essentially is.

Warner’s and Whittemore’s *American Urban Form* stands out as a concise narration of the various dynamics that shaped the physical form of the American metropolis. The authors unravel the origins of American urban living in a rather imaginative way: they deploy a fictional ‘City’, which despite its fictivity is nevertheless founded on a reality – the commonalities and consistencies traced from the urban histories of Boston, Philadelphia and New York.

The book provides an informative account of the multi-layered interplay of the geographical, socio-economic and political parameters that prevailed in each era of this hypothetical City’s significant urban formation (and re-formation). The various phases of the American urban evolution are described, going back to the simple physical patterns of the first 17th century colonial village, up to the post-war polycentric city with its spreading suburbia and the complexity of the millennium metropolis. The book is highly engaging in its textual descriptions, which are supported by excellent hand drawings by Whittemore. These relate the socio-economic context of each era to its respective changes in built form and the authors thereby manage to portray the overall picture of urban life at different historic epochs. Descriptions of the mixed population, multi-culture, building types and regulations, changing modes of dwelling and lifestyle, are all considered in relation to the shifting modes of the City’s wealth production: starting from crop and trade, through to fabrication and industrialisation, and up until the most recent rise of corporate industries. More importantly, this account of socio-spatio-temporal events is consistently considered alongside the interests of each time-period’s land dealers (whether private, public, or federal). Addressing both professionals and the general reader, *American Urban Form* manages to summarise in an explanatory and simple way the key parameters – and the policies behind them – that defined American urbanity.

For the readers of JOSS the book entails a challenge: that of following the series of events without having a specific image of the grid structure and its particular configurational properties. In that sense, the book serves more as a description of the ‘multiplier effect’ processes per se and their impact on the urban built form, rather than the relation of these processes to any city’s two-dimensional spatial properties.