BOOK REVIEW

Castells, Manuel (1996). *The Rise of the Network Society (The Information Age: Economy, Society and Culture, Volume 1)*. Malden, MA: Blackwell Publishers, Inc. (556 pages, bibliography 51 pages, index 23 pages).

Manuel Castells has helped to alter the direction of social research with such works as *The Urban Question* (1977) and *The City and the Grassroots* (1983). In his latest book, *The Rise of the Network Society* (part one of a three-part series), Castells attempts both to synthesize decades of intellectual thought (his own and others) and to generate a conceptul structure to embody the myriad societal changes occurring worldwide. The book provides a thought-provoking description of the collective human experience during the current Information Age. While the book attempts to cover many aspects of the economy, society, and culture, the most novel aspects of the book, which Castells refers to as "the architecture and geometry" of the network society, should be of particular interest to geographers and mathematicians, alike.

Castells begins the book with a description of how the Information Technology (IT) Revolution is distinct from the Industrial Revolution. The distinguishing characteristic of the new IT paradigm that particularly affects social and economic transformations is its "networking logic". As opposed to the linear or serial set of relationships during the Industrial Revolution, epitomized by Fordist mass production, new information technologies are facilitating more complex interactions that are organized by networks. Clearly, network structures are not new, but Castells argues that new information technologies, such as the Internet, allow such structural types to pervade social and economic processes.

Castells describes how the fundamental aspects of networks allow for changes that are leading to a variety of transformations, such as decentralization within firms, telecommuting of workers, interactions in the virtual community and economic globalization. Networks can expand without limits by simply integrating new nodes that share the same means of communication with other nodes. Networks are much more flexible and malleable, because there is no overarching organizational or institutional shape.

Building upon his previous research in political economy and urban sociology, Castells views the current transformations in urban form around the world as the manifestation of the interconnections and linkages between cities. The "space of flows," which pertains to flows of capital, flows of information, flows of technology, etc., intertwines the fates of nodes in the network, but does not predetermine them. Winners and losers in the global urban network are difficult to predict and are continuously emerging from the space of flows. Perhaps an example of Castells's view is the economic uncertainty that ensued after the East Asian crisis in 1997. The path of the pandemic affected the Pacific Basin, but did not

travel to the US (yet), as widely feared.

Potential future research in planning based on Castells' framework should center upon the policy implications of the new IT paradigm. When are local planning initiatives held hostage by the global forces in the space of flows? Are different networks destined to remain infinitely apart due to incompatible means of communication? Are there policy remedies for the segmentation of society based on those who are networked and those who are not? Geographers and mathematicians will recognize the applicability of a graph theoretic approach to decipher complex networks, which may be appropriate for a planning context. Such methods can, for example, identify critical linkages that would cripple a section of the network if severed.

Castells interjects several heady topics throughout the book such as the logic of capital accumulation, the relationship between society and postmodern architecture, and the social arrhythmia of the natural lifecycle. The book is written like a very long essay, since Castells does not provide rival explanations for many of the issues included in the book. There are also some unclear aspects of his framework. For example, why do some networks have nodes that dominate flows, as in the urban network, whereas others do not, as in the Internet? Although Castells specifically states that "this is not a book about books", the amount of detail compiled from a wide variety of sources tends to detract from the originality of his thoughts. For the reader who already knows about the rise of Silicon Valley and the Latin American debt crisis, Castells' synopses are redundant. For the reader new to topics related to the high-technology economy and globalization, however, this book provides a comprehensive survey of the literature.

The Rise of the Network Society is a book to read neither quickly nor only once. If time is a limiting concern, however, the final three chapters, which include a provocative discussion about space and time in the network society, incorporate the crux of Castells's vision of society at the turn of the 21st century.

Reviewed by

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