



The Connected City: How Networks Are Shaping the Modern Metropolis

By Zachary P. Neal
New York: Routledge, 2013.

Recent years have seen a resurgence in research on city systems and urban networks (Taylor et al. 2013). It is laudable that one of the leading authors on the forefront of that revival has committed himself to writing a textbook for university students. The result is an accessible book that explains what urban network research is all about in clear, univocal terms.

As many university teachers will recognize, the pressure on the curriculum has increased significantly due to the simultaneous volatility in theoretical, methodological, and empirical topics. It is in that respect that Neal's choice to combine an introduction in urban studies and the basics of social network analysis in one book is very worthwhile since it allows for the combination of some important topics within a single course. Throughout the chapters, the text is interspersed with 29 "method notes" explaining most of the rudimentary methodological concepts of social network analysis. These method notes are explicitly linked to ongoing topics in the chapters. This provides a good impression of what the possibilities of social network analysis are and that the execution is not as complicated as might be thought. Neal justifies the topical juxtaposition by arguing that while *urbanization* is one of the most important topics for social research, *network analysis* is an important tool for making sense of cities. And we can only fully agree that network analysis indeed allows us a way to bridge micro-macro problems, can help us become more precise, and reevaluate age-old questions in urban studies. However, Neal might be pushing it a bit too far when he insists that an abstraction into networks is not only a viable and interesting research strategy but that communities or culture actually *are what they are by virtue of their network structure*. Such a statement comes very close, and perhaps too close, to an embrace of structural determinism. That invokes well-known criticisms such as that it underestimates the role of human agency and culture, and puts too much causal determination in the structure of the network.

The following eight empirical chapters are organized around three consecutive geographic scales: those of "networks within cities," "cities as networks," and "networks of cities." Despite that, such a "nesting dolls" approach to geographic scale is not without its critics; it does provide the pedagogical strength of teaching students how to observe "hidden" network structures in taken-for-granted contexts. The first few chapters deal with the "subcity" scale and address "communities" (Chapter 2), subcultures (Chapter 3), and urban politics (Chapter 4). Neal conjures an interesting network perspective for all these three chapters: by illustrating how communities relate to social networks instead of a priori spatial categories, how subcultures in cities are related to various social identifications and preferential attachment, and how urban politics can meaningfully be understood through researching power brokerage in influence networks. However, it is in these chapters where the structuralist ontology is most disputable. For example, the politics of distribution and local (economic) dependency tend to get somewhat overshadowed in the insistence on the definition of communities as social networks that can "liberate" themselves through the Internet. Such a claim is obviously not true for everyone and not just because of an unfortunate position in social networks. A similar feeling is evoked in the chapter on urban politics where the substantive issues seem to get subdued somewhat in the accounts of "influence" and "brokerage."

As the geographic scale increases in the later chapters, the network approach starts to feel inclusive for a larger range of relevant topics. The city-level chapters (5 and 6), on urban form and organization, address much more formal networks such as infrastructure and organization, which have long since been studied with network analysis and provide excellent introductions in the respective subjects. Chapters 7, 8, and 9 zoom out to the regional, national, and global scales, respectively, and provide a more-or-less state-of-the-art introduction to the issues of polycentric urban networks and global/world city research, which are highly recommended. The final chapter is on “the new science of urban networks,” which discusses some of the “universal network science” concepts such as “free scale networks,” “small worlds,” and preferential attachment. Although meaningful and relevant, the chapter feels a bit too reminiscent of the days when we tried to “fit” urban systems in “general systems theory,” and some disclaimers regarding scientific universalism might have been in place.

244 The book’s approach to combine two important topics, in combination with a “scalar” exposition in which the subject matter is treated scale by scale, makes the book strongly reminiscent—a network analyst would say isomorphic—of Flint and Taylor’s (2000) *Political Geography: World-Economy, Nation-State & Locality*.¹ In the case of Flint and Taylor, the book is built around the juxtaposition of political geography and world systems theory in the same way as Neal juxtaposes urban studies and social network analysis. And the peculiar combination of strengths and weaknesses that emerges from such an approach is evident in both books. Where both subjects mesh well, the book works exceptionally well: like the chapters on infrastructure and city networks. Where the subjects mesh less well, they tend to feel a bit artificially imposed on one another such as the aforementioned weaknesses in the chapters on urban politics or culture. The advantage of such an approach for pedagogical reasons is that the subject matter seems much less ambiguous than it actually is. At the same time, we might want to teach our students that the world has more ambiguity and rough edges than our models of it purport. Its self-assurance is the weakness of this lucid, well-written, and pedagogically sound textbook on two crucial topics in contemporary urban studies.

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References

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- Taylor, P. J., Beaverstock, J. V., Derudder, B., Faulconbridge, J., Harrison, J., Hoyler, M., Pain, K., and Witlox, F. 2013. *Global cities—Critical concepts in urban studies*. Abingdon, UK: Routledge.

¹ We compare here with Flint and Taylor’s fourth edition (2000).