Stephen Graham & Colin McFarlane (eds)
Infrastructural Lives: Urban Infrastructure in Context.
London & New York: Routledge. 2015. xiii + 247 pages.

I read the opening lines of this book's foreword – written by the esteemed anthropologist Arjun Appadurai (2015), a widely recognized voice in globalization studies – with utter disbelief. "This timely book," Appadurai (2015: xii) writes, "is sure to become a definitive work on the now growing literature on urban infrastructure". The book is "timely," no doubt, but "sure to become a definitive work?" How outrageously bold!? This is the equivalent of unambiguously claiming that a modest edited volume such as *The Social Construction of Technological Systems* (Bijker et al., 1987) would become canonical in a small field such as science and technology studies (STS) after reading a pre-publication draft manuscript of the edited volume. Still, after reading *Infrastructural Lives*, I now agree with Appadurai (2015); his claim is not an overstatement. The volume has promise; it may live up to the hype. Still, the collection has a disconcerting blind spot.

The entire edited volume hangs on the following hook, which emphasizes *visibility* and *experience*:

> The analytical lens that gives this volume its originality is to make infrastructure more visible by tackling it not as a dimension of urban technology but as a dimension of urban everyday life (Appadurai, 2015: xiii).

This visible/invisible interface, which is culturally produced and differs from context to context, is of considerable utility to chapter authors. Of course infrastructure is intentionally hidden from plain sight, and for myriad reasons, often safety reasons. That infrastructure blends into everyday life (i.e., becomes taken-for-granted, and, thus, black-boxed) should be self-evident to sociologists and STSers who have, over the years, taken-for-granted such taken-for-grantedness. In this light, defending the significance of bringing infrastructure into the light for readers and making infrastructure visible through research hardly needs to be defended at all. The originality of emphasizing the notion of *visibility* is primarily in applying it to this new line of research aimed at uncovering how individuals around the world *experience* infrastructure or what the editors call "everyday infrastructural experience"[1] (Graham & McFarlan, 2015: 1). Thus, rather than focusing research efforts on determining some particular infrastructural system's capacity, it is inputs and outputs, or it is slow design and development over time, the editors aim to attend to – through a series of diverse case studies – infrastructure as a relational, material, and lived everyday experience.

The book offers readers fresh metaphors for conceptualizing infrastructure. Beyond the notion that infrastructure is experienced, infrastructure is framed in terms of "metabolic" processes (Graham & McFarlan, 2015: 6) wherein we learn that like humans, infrastructure needs "to rest, restore, and recuperate" (Shaw, 2015: 175),

or that the city is a "laboratory" (Cavalcanti, 2015: 89) that "metabolizes experiments" (Broto & Bulkeley, 2015: 202). There is incessant emphasis — at least the authors are all essentially on the same page — with an "ecology of practices" (Simone, 2015: 18).

This rather vague analytic frame of "ecology of practices" is associated with "improvisational urban practices" (Rao, 2015: 54), and impromptu negotiation of systematic failures in infrastructure referred to as "jugaad" (Rao, 2015: 54), and with the perpetual need for "incremental" practices (Simone, 2015: 32) associated with adjusting and readjusting infrastructure, all which are framed as "speculative anticipations" (Simone, 2015: 21). And there is more. That infrastructure seems to somehow feed off of its own discourse of "destruction, decay, and inadequacy" (Rao, 2015: 40) and "the politics of inadequacy" (Rao, 2015: 40) are fascinating themes in this edited volume, with important, but predictable, analysis of public discourse, especially in terms of the dispossession associated with the logic of "revanchinist" (Graham et al., 2015: 70) and "expansionist" (Salamanca, 2015: 117) rhetoric, which depicts the poor as a "pathology" (Graham et al., 2015: 70) and informal settlers as a sign of "social disorder" (Graham et al., 2015: 68; Cavalcanti, 2015: 88). In all, the edited volume hangs together effortlessly, and this is because of – not in spite of – the rich diversity of its chapters.

I would be remiss not to mention the title, which I both do and do not like. *Infrastructural Lives* could just as well have been *Infrastructure Lives*, to capture more fully the double entendre the editors imply. After all, a key insight is that at some times and in some places people *are* the infrastructure and, hence, we could say that this infrastructure *lives* (verb). Also, the primary research aim of the book is to capture the experience of living with infrastructure and, thus, we call these infrastructure *lives* (noun), as in, the lives of people coping with infrastructural environments.

In my closing remarks, I come full-circle, and reflect on *visibility* as a virtue, and the long-term dangers this poses as a justification for the conduct of research. The danger is that all this unveiling has a limited shelf life. "[W]hat gives this volume its originality," Appadurai (2015: xiii) writes, "is to make infrastructure more visible," which is a reasonable justification for undertaking this book-length edited volume. However, if the approach laid out in this book becomes the "definitive work" that Appadurai (2015: xii) so forcefully claims it will be, then, years down the line, the need for visibility may no longer serve as such a powerful justification for conducting research on urban infrastructure.

References

Appadurai A (2015) Foreward. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, xii–xiii.

Broto VC & Bulkeley H (2015) Maintaining experiments and the material agency of the urban. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 199–218.

Cavalcanti M (2015) Waiting in the ruins. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 86–113.

Bijker W, Hughes T & Pinch T (eds) (1987) The Social Construction of Technological Systems. Cambridge, MA: MIT Press.

Graham S & McFarlan C (2015) Introduction. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 1–14.

Graham S, Desai R & McFarlan C (2015) Water in Mumbai. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 61–85.

Rao V (2015) Infra-city. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 39–58.

Salamanca OJ (2015) Road 443. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 114–135.

Shaw R (2015) Cleaning up the streets. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 174–196.

Simone A (2015) Relational infrastructures in postcolonial urban worlds. In: Graham S & McFarlane C (eds) *Infrastructural Lives: Urban Infrastructure in Context.* London & New York: Routledge, 17–38.

Notes

1   Emphasis in original has been removed.

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