

Gandy, Matthew. 2014. *The fabric of space: water, modernity, and the urban imagination*. Cambridge USA: The MIT Press. 351 pp. ISBN 978-0-262-02825-7; US\$30.

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In this book Matthew Gandy examines the ways through which city and nature dialectically co-construct each other in a process traversed with cultural, historic, economic and political features. Using archives, interviews, and ethnographic observations, the author establishes data about six metropolises – Paris, Berlin, London, Lagos, Mumbai, and Los Angeles – each chapter focusing exclusively on one of these cities. The author builds upon a triple conceptual axis formed by water, modernity and urban imagination.

The idea of water as set of processes, practices, and meanings is essential to the entrenchment of political ecology as a disciplinary field. Indeed, Gandy defines political ecology as a theoretical synthesis between political economy and the "hydro-social cycle" (p.5). This means that what is known as urban infrastructure stems from negotiations between political actors, ideological struggles, and power relations that result in the uneven distribution of natural resources and environmental hazards related to water.

As paradoxical as it may seem, the excess and the absence of water in the Global South are not only coincidental, but also complementary. Flooding as well as water shortages are connected in cities like Mumbai and Lagos, where illegal dwellings constitute the ultimate example of how the absence of metabolic services are related to the lack of settlement policies that should prevent the occupation of flood-prone areas. Gandy states that these cases point to the extent to which the constitution of the "hydrological subject" should be a measure of urban citizenship in different social-environmental contexts (p.221).

Throughout the book, "modernity" is acknowledged and discussed at different scales of analysis. At a first look, the author's definition of modernity is in dialogue with what Norbert Elias (1978) refers to as the "civilizing process," a set of transformations in the behavior within the sensorial realm and an increase in the individual capacity for self-regulation. For example, this process takes place in nineteenth-century Paris where changes in the tolerance to body odors led to the popularization of individual baths and bathrooms in dwellings. The increasing flow of water from households influenced the reformulation of Paris sewer system that reached only 20% of the city at the time (p.38). The same biases about hygiene and the rationalization of space also oriented the debates among Parisian sanitation authorities regarding the possibility of closing household cesspools and redirecting wastewater to the newly created sewer network.

Even though these notions of modernity do not sidestep Norbert Elias' influence, the following chapters draw this concept closer to other works in urban political ecology. The first chapters have an emphasis on sensibilities and in hydric imaginaries related to hygiene in Paris and recreation in Berlin, but then further discussions present a more politically-oriented approach which takes into account modernity as a "promethean project"(Kaika, 2005). Gandy's treatment of modernity's "promethean project" appears in his analysis of swamp drainage projects in Lagos, and in the rationalization of water distribution in Mumbai. Those projects are based on ideals of civilization that manage the separation between nature and culture in order to exert control over nature through technology and capital investment. Rather than being restricted to the European colonial project, these types of technocratic models of intervention can also be observed in the channelization of the Los Angeles River and in the creation of a complex flood defense system in London.

Imagination is the third theoretical pivot supporting Gandy's accounts. It bridges the gap between the concepts of "water" and "modernity" and also incorporates the method employed by the author. This method consists of the use of all kinds of works of art, literature, and photography to discuss modernity as a historic and geographic form of the relationship between water and urban infrastructure. Throughout the book, imagination also acquires different meanings that suit distinct analytical purposes.

First, urban imagination is understood as "public imagination" (p.181). Cities are depicted in paintings, movies, literature, and common sense. Gandy intertwines these elements with urban policies, showing that they are mutually constituted and self-referenced over time. In chapter 2 Gandy outlines the role of Félix Nadar's nineteenth-century photographs in articulating visible and invisible features in the making of urban space, offering fresh contributions to the already sizeable discussions about Haussmanian Paris. His analysis of the *imagination* of Paris sewers focuses on the shift from symbols associating sewers with death,

disease, and darkness to ones which emphasize progress and cleanliness and thus enhance the status of the underground realm of the City of Lights.

Secondly, imagination appears as "creative imagination" (Durand, 2008) which is characterized as the production of knowledge necessary to create new technical solutions to environmental problems. The chapter on London offers a compelling example of the existing linkages between literary representations and flood control policies. The dystopian, inundated London in J. G. Ballard's science fiction novel *Drowned World* is a sharp expression of the constant fear of a flooded city. Gandy explains that this fear is a long-term experience for London inhabitants and administrative boards, fed by predictions that eventually the Thames Barrier will not be capable of avoiding water encroachment. These "hydrological uncertainties" (p.203) reveal the incoherence of massive capital investments in technocratic solutions that sooner or later will become obsolete. Hence, when modernity's "promethean project" reaches its limits, imagination can help overcome the fear of inundation, opening the path to alternative paradigms of interaction with water.

Regarding "creative imagination" it is essential to mention the quality of Gandy's photographs throughout the book. The richness of the photographs lies not only in their use to reinforce the written content, but also in the abundance of meaning that evokes broader social contexts beyond those found in the text itself. Gandy's photos of Mumbai, for example, are far from mere illustrations. On page 127 we are given a shot of Mumbai slums that could also be seen in Latin-American cityscapes, where vast urban infrastructure projects also provide ground for environmental degradation and the reproduction of inequalities. By showing the huge pipes that carry water to the middle class neighborhoods by tearing through shantytowns with no water supply, the picture itself denotes the sharp urban contrasts materialized in the lack of access to water in the Global South.

The pictures supporting the chapter on the Los Angeles River reveal the complexity between the extraordinary and the paradigmatic in the city's drainage infrastructure. While the author points to the uniqueness of the relationship between the city and its waters in that specific context, photographs help us engage with the universality of certain models of urban drainage and flood control during the Twentieth Century. Just as in Mumbai, the photos of the Los Angeles River bring together local and the global experiences, tracing a path between the individual example and the technocratic paradigm.

In addition to valuable information about six distinct urban experiences, the book is an insightful read thanks to Gandy's outstanding talent in managing multiple sources of data to address the modernization process. This skill enables the author to bridge the gaps between different epistemological realms such as public discourse, scientific knowledge, and individual creativity.

Viewed through an anthropological lens, it seems that Matthew Gandy's modernity approach is lacking a critical examination of the tensions between the western intellectual constructions that separate culture from nature and the everyday practices that constantly reconfigure the thresholds between these two ontological realms. Gandy doesn't overcome his own definitions of culture and nature which are embedded in a European reflexive tradition. Even so, he is quite aware of the utilization of technocratic models that replicate the same kind of partition between nature and culture, and criticizes the indiscriminate adoption of such measures regardless of sociological and historic specificities. His sensitive accounts of the effects of European colonial projects in places such as Lagos and Mumbai are still relevant, especially in the wake of various recent development projects in Global South cities.

References

- Durand, G. 2008. *Ciência do homem e tradição: o novo espírito antropológico*. São Paulo: Triom.
- Elias, N. 1978. *The civilizing process. Vol. 1, the history of manners*. Oxford: Basil Blackwell.
- Kaika, M. 2005. *City of flows: water, modernity, and the city*. New York: Routledge.

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