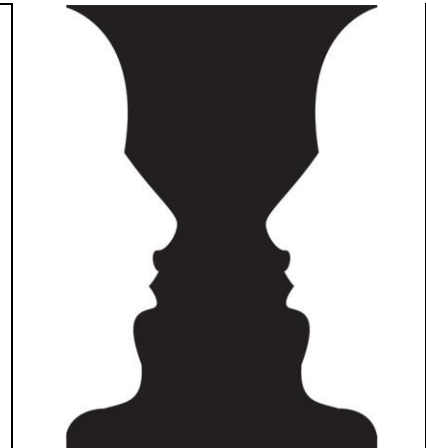


---

JOURNAL OF COMPARATIVE RESEARCH IN  
ANTHROPOLOGY AND SOCIOLOGY

Copyright © The Author, 2016  
Volume 7, Number 2, Winter 2016  
ISSN 2068 – 0317  
<http://compaso.eu>



**Starosielski, N. (2015) *The Undersea Network*. Durham: Duke University Press**

*Book review*

Kris Decker<sup>1</sup>

Rarely did a book on my desk get as much attention of colleagues passing by as this one, thanks to its cover showing two massive, concrete-coated cables which mysteriously emanate from the water somewhere in Guam, at a sandy shore of the Pacific Ocean. Withered and overcome with rust, these cables could be the relicts of a bygone era; they are, in fact, part of today's network infrastructure that directs the largest part of data traffic between North America, Asia, and Australia and keeps many digital lives working the way they do.

Given that undersea cables are absent from daily experience and remain invisible for most of its users, it might come as a surprise that such hefty material is still needed for running the Internet. More and more ordinary activities - both professional and profane - require a network connection and (ever larger) amounts of data, but the cable infrastructure behind these activities is hardly taken into account when the vices and virtues of living within digital technologies are discussed. “Although contemporary networking continues to depend on wired infrastructure, we lack a language - beyond terms like 'a series of tubes' - to describe just how grounded these systems remain” (p. 9), states Nicole Starosielski and experiments with constructing that very language in her debut monograph which explores the transpacific cable network historically and ethnographically. By following the network's route, the author reconstructs some of the immense efforts mobilized for the construction of this infrastructure as well as the numerous frictions - technical, environmental, economic, political - that occurred during that process, rebuking the notion of the Internet as a seemingly free-floating and delocalized entity and turning it into a place-bound and fragile matter in need of incessant “repair and maintenance” (Graham & Thrift 2007).

---

<sup>1</sup> Science Studies Unit, University of Lucerne, Switzerland, [kris.decker@unilu.ch](mailto:kris.decker@unilu.ch)

Far and wide travels through 13 countries and some amount of patience were required to get hold of a recalcitrant object of ethnographic inquiry that only surfaces at scattered landing points all along the shores of the Pacific Ocean and at cable stations usually kept under surveillance and hidden from view (with the notable exception of Papeete, Tahiti, where the cable landing point has become a memorial site). When Starosielski opens her diary, sketching the diverse environments, both material and cultural, the network runs through, it dawns on the reader that every mile of her strenuous journey has been worthwhile. Hard to imagine how an exclusively historical or theoretical account could have depicted the infrastructure's manifold contours in such stunning concreteness.

The author digs out traces of the undersea network by means of interviews, observations, and analyses of a wide range of written sources, contemporary and historical, and puts the materiality of the network centre stage in most of the book's six chapters, an approach she refers to as "network archeology" (p. 15). She starts with an outline from the era of the telegraph to the fiber-optic systems of the present, anchoring their history in what is called "copper cable colonialism" (p. 31), and then analyzes different spheres of popular discourse around the cable network, distinguishing narratives of "connection and disruption" from "nodal and transmission narratives" (p. 67f.). The topics of the subsequent chapters are more diverse, such as the shifts in the spatial organization of labour at an AT&T station in Keawa'ula, Hawai'i; the struggles between cable companies, government agencies, and the local populations whose land is afflicted by cable-laying, with the companies mostly winning out the competition; the critical role of remote islands for the functioning of the whole network as well as their vulnerability to changing geographies of power, as in the case of Yap, one of the Federated States of Micronesia, once an important passage point of the network. Focusing on a cable station which has been turned into a seafloor observatory in the Canadian town of Bamfield, British Columbia, the author muses about the "material afterlives" (p. 202) of the infrastructure in the final chapter, describing but a few of the entanglements between cable systems and marine research.<sup>2</sup>

Starosielski, currently at New York University's Department of Media, Culture, and Communication, designed a dense patchwork of concepts, many of them metaphors from the realm of ecology and oceanography, throughout her analyses. "Strategies of insulation" (p. 19) is one such concept, referring to both the technical and the rhetorical operations of cable constructors to detach and protect their cables from the "turbulent ecologies" (p. 140f.) around them, be it water currents, pirates, or changes in governmental regulations. While some of these concepts could be considered avant-garde Media Studies jargon, I think they do serve their purpose of introducing "a sense of place (...) to our imagination of digital networks" (p. 25). Readers who feel kept at a

---

<sup>2</sup> Helmreich's *Alien Ocean: Anthropological Voyages in Microbial Seas* (Oakland 2009) is a much more detailed ethnographic account of deep-sea science, though not putting the infrastructure centre stage, but the sublime microbes that are investigated by marine biologists.

distance by the author's style will be compensated by a digital platform complementing the book which provides a variety of photos, maps, and short texts.<sup>3</sup>

A few passages of the book remind us that no historical-ethnographic account can ever be complete or capable of paying equal attention to all relevant actors. Judging from the quotes and footnotes, I would argue that cable engineers, corporate actors, and telecommunication experts are granted the most credibility in this book, compared to, for instance, interest groups opposed to cable-laying projects. This aspect turns out to be problematic when the author claims that "[o]n the whole, the direct environmental impacts of cable installation and maintenance, even plowing a cable into the seabed, are small" (p. 145), a judgment reaffirmed in another chapter (p. 202), which makes the struggles of environmentalists (e.g. in California) appear to be a mere oddity, all the more when, according to the author, there is still "limited research on cable systems' actual impacts" (p. 145).

With the exception of cable station workers figuring in the third chapter and a few people living in proximity to cable landing sites, the book is less interested in subaltern actors, such as the fishermen whose activities are, however, said to be one of the major sources of the network's instability (p. 169). Sadly, very little can be found on the fishermen's relationship to the cable, nor is there an in-depth account of the irreplaceable individuals who have been working on the ships to lay and maintain the cables. As a consequence, the dirty sides of cable laying remain buried on the seafloor.

To be sure, Starosielski's account is far from lacking a critical stance, but rather encounters the difficulty of dealing with all of the "invisible work" (Star & Strauss 1999) behind a gigantic infrastructure and with the variety of actors affected by it on 234 pages only. And yet: this book, as fragmentary as it may sometimes be, embraces a distinct form of writing about infrastructures and displays an astoundingly rich vocabulary that is likely to be of heuristic value beyond its initial field of application. In this sense, *The undersea network* is a paradigmatic exploration of the marginal materialities upon which today's Empires of Data depend.

## REFERENCES

- Graham, S. & Thrift, N. (2007) Out of order: Understanding Repair and Maintenance. *Theory, Culture & Society* 24 (3), 1-25.
- Helmreich, S. (2009) *Alien Ocean: Anthropological Voyages in Microbial Seas*. Oakland: University of California Press.
- Star, S.L. & Strauss, A. (1999) Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work. *Computer Supported Cooperative Work* 8, 9-30, 1999.

---

<sup>3</sup> See [www.surfacing.in](http://www.surfacing.in).