

The Conquest of Vertical Space

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Since the early 2000s, the “spatial turn” in Asian studies has given us a rich vein of work on transregional connections. Historians, anthropologists, and cultural geographers sought to understand how social and cultural space—the spaces made and experienced by diasporas and others on the move—transcended the boundaries of empires and nations. In a series of SSRC meetings, for instance, the idea of InterAsia emerged to encapsulate a new conception of region-making. Initially, the study of inter-Asian connections—which focused primarily on the study of diasporic networks and on the circulation of texts and ideas—took place in isolation from the growing and vibrant body of work in environmental history. Only in the 2010s—with the publication of Prasenjit Duara’s *Crisis of Global Modernity*, and then in a series of works that myself and many others have produced—did the fields of InterAsian history and environmental history begin to come together. Understandably, histories of Asian connections were wary of an older, discredited environmental determinism that had used spatial categories like “monsoon Asia” to paint a picture of static Asian societies at the mercy of nature’s vagaries.

This volume’s focus on hydrological histories is an invitation to think again. Drawing on research in both South and Southeast Asia, my chapter will focus on a key phenomenon in modern Asian history—the conquest of the “vertical” space of water, a process both akin to and connected with the search for mineral resources underground. I use the term “conquest” to

indicate an aspiration, rather than an achievement; I seek to uncover and understand the imaginary that held the conquest, mastery, or subjugation of water—all martial terms that were commonly used in the language of the 1950s and 1960s—to be a primary aim of postcolonial states. It should come as no surprise (to anyone who has read Jim Scott or the profusion of critical works on the developmental project) that this conquest proved elusive. Moreover, it came with a cascade of unintended consequences that now threaten the water security of a significant portion of humanity.

The vertical dimension, as I envisage it in this paper, acquired ever-expanding scale in the twentieth century, as new forms of knowledge, new ways of seeing, allowed states and engineers to map water underground, as well as to understand the atmospheric and oceanic dimensions of the water cycle. This is both a material history—a “big” history of dam building and hydrological engineering on a truly enormous scale, and a “small” history of millions of groundwater pumps and tubewells—and an intellectual history: a history of new ways of mapping, and visualizing, vertical space, going beyond cartography to encompass aerial photography and remote sensing.

A fundamental tension emerged by the 1960s: climate scientists could now see that the hydrological cycle in Asia was teleconnected across oceans and continents in a vast, coupled oceanic-atmospheric system; yet this sense of the scale of water was increasingly at odds with the engineer’s perspective—itsself a transnational and, in Prasenjit Duara’s terms, a circulatory one—which saw water as a resource to be controlled in the national interest “one river valley at a time,” in the words of an Indian government publicity pamphlet of 1968. I use the case study of

India's large-scale turn to groundwater extraction, beginning in the late 1960s, to explore further these tensions, and to open up discussion of the complex and cumulative effects of the postcolonial attempt to conquer water. I am interested in the open-endedness of the new technologies of visualization—satellite data is open, now, to environmental activists seeking to expose the hidden effects of reckless policies, even as water data remains closely guarded by states who seek to engineer ever more encompassing solutions to the problem of water.