In Water: Abundance, Scarcity and Security in the Age of Humanity, Jeremy J. Schmidt details the intellectual history of US water management philosophy, tracing the shift towards considering water a resource to be brought under the watch of the state as well as the transformation from a discourse of abundance to scarcity. In showing how water resources are far from a neutral category, this well researched and enlightening book is an important read for understanding how we perceive water today, writes Kathleen Chiappetta.

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Water was once abundant. Now it is scarce. As a result of this shift, water is connected to security issues. For many, this global narrative has spouted questions as to whether we have a water management philosophy or even whether water can be managed at all. Jeremy J. Schmidt takes the position that not only do we have a philosophy, but also that it has proved to be exceptionally resilient. In Water: Abundance, Scarcity, and Security in the Age of Humanity, Schmidt traces the development of this interdisciplinary approach to water from its nascent years in the early twentieth century in the United States to its global reach today.

The book is divided into four parts – Abundance, Scarcity, Security and Rethinking the Anthropocene – and in each, Schmidt introduces experts and their key theories. He builds this global narrative by showing the progression of thought and reflecting on how it was influenced by a number of disciplines, particularly anthropology and geology. How water is managed today is the culmination of a century of US ideas on natural resources and US resource management and conservation techniques. Seeing water as a resource replaced alternative ways of managing water and this narrative has framed our understanding and conceptualisation of it.

Overall, Schmidt contends that ‘normal water’—defined as ‘the program of bringing water’s social and evolutionary possibilities into service of liberal forms of life’ (6)—is key to understanding how water was managed throughout the twentieth century. In this book he shows, in great detail, how this belief developed. In Part One, Schmidt recounts how water became a resource and was hereby brought under the watch of the state. Like the move from nature to natural resources and society to population, water became governed, calculated and controlled. In doing so, this
replaced metaphysical understandings of water with ‘geological, social, and technopolitical arguments’ (88).

In the early twentieth century, there was a focus on land and Otis Tufton Mason (the second curator of the Smithsonian Museum) thought this ‘orientation […] failed to see how human actions modified an ever-evolving environment’ (45-6); what he called the ‘Land Problem’. Building on the concepts of earlier experts, Mason also suggested that human evolution and the Earth were mutually produced (45), which he termed ‘Earth-making’. In fact, this nature/society dualism, and the failure to reject it, is something that Schmidt details throughout the book. ‘Earth-making’ helped solve the ‘land problem’ by essentially ‘allowing for the creation of geologically grounded social institutions’ (66), which WJ McGee (another key expert referenced throughout the book) thought enabled Americans to enter into a ‘new evolutionary stage’ (66).

In a significant third chapter, Schmidt describes how water has been tied to liberalism in the United States, which set the coupling on its way to becoming an international premise for how water is managed. In the early twentieth century, McGee declared water a resource and advocated that water belonged to the public. In fact, conservation for McGee was based on principles of equal rights. To accomplish this realignment in how water was conceptualised, it became essential that water was consolidated ‘within institutions of collective and public ownership [which] was a safeguard against economic exploitation’ (85).

In each part of the book, there is one expert of particular note. In Part Two, that expert is David Lilienthal, the second director of the Tennessee Valley Authority (TVA). Building on McGee’s declaration that water is a resource tied to liberalism, Schmidt subsequently focuses on the TVA and how water abundance was replaced with water scarcity. Lilienthal believed that how water was managed by the TVA was something that could be exported internationally. TVA-style development was the blueprint for the International Hydrological Decade, which saw the growth of international cooperative research programmes that aimed to determine the total amount of water and its distribution on Earth. It was also the model that buried abundance, both in the geological sense of the word – ‘possible avenues for evolutionary abundance’ (95) – and in the cultural sense of the word – ‘competing forms of life’ (95) that did not conceptualise water as a resource tied to liberal democracy. This added to the water philosophical narrative by marking a transition from a discourse of abundance to scarcity.

In Part Three, the narrative centres on security and uses two important frameworks for water management: Integrated Water Resources Management (IWRM) and the water-energy-food-
climate nexus. In both paradigms, water continued to be part of the ‘public trust’ (152); however, there was a need for new institutional arrangements to deal with the fact that water was increasingly becoming an economic good (150) and part of security issues at all levels of society, from the global to local. IWRM ‘linked the human-water relationship to the security of both democratic forms of participatory management and ecosystem vitality’ (159). IWRM connected human activity with changes in the environment; yet, given how complex and interconnected systems are today, there were calls for a new paradigm for managing water and improving resilience to conflicts. The term ‘nexus’ was used to describe the links between water, energy, food and climate, and their connections to security. As was the case in previous decades, there was the need to tie US interests with US expertise in resource management (172). With the ‘nexus’ came a focus on the necessity of developing resilience so as to mitigate security issues. For instance, US interests in regions like the Nile and Indus became twinned with calls to improve infrastructure.

In Part Four, Schmidt looks at ways we can change the narrative to tackle today’s water problems. The Anthropocene is ‘a period meant to mark the epoch in which humans also significantly alter geological processes […] a time in which humans have come to rival the great forces of nature’ (8). In this era, there is a desire to make things public and challenge the dominant narrative that water is a resource. As an example of how human relationships to the environment may change, Schmidt focuses on how Aldo Leopold, a compatriot of McGee, saw ecological systems. Leopold viewed conservation and human relationships to the environment differently. For Leopold, the ‘land’ included ‘waters, plants and animals’ and the ecological community as ‘everything assembled within the category of “land”’ (216). It was permissible to manage such systems; however, it was necessary to ensure that every part of the ecological system was conserved, including weeds. Essentially Leopold’s ecological thinking of the system as a whole was at odds with judgments on land in which, for example, weeds, watery brooks or the number of hawks became the primary reasons for the management/conservation of natural resources. Instead, he essentially believed that species and fauna were ‘entitled to share the land with us’ (218).

Many books today comment on what is wrong with how water is managed or ways to improve our water management systems. In this book, Schmidt narrates the trajectory of our water management philosophy. He advocates that ‘social scientists should refuse the notion that water resources are a neutral category’ (229), given that this is supported by judgments which in turn ‘foster unequal practices that favour one cultural understanding of water over others’ (229). In doing so, Schmidt shows how this philosophy continues to frame our relationship to water even if other possible views, such as those of indigenous peoples, also exist.

Overall, this book is well researched, and Schmidt is thorough in explaining this global narrative. There is just so much detailed information that readers will surely find it enlightening. Given the breadth of the argument spanning almost a century, the book is an important read for understanding how we see and manage water today.

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Note: This review gives the views of the author, and not the position of the LSE Review of Books blog, or of the London School of Economics.