

Agar, M. 2015. Book review of Pahl-Wostl, C. 2015. Water governance in the face of global change. Springer International Publishing. Water Alternatives 9(1): 165-167



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## BOOK REVIEW

**Pahl-Wostl, C. 2015.** Water governance in the face of global change. Springer International Publishing. Print ISBN 978-3-319-21854-0. xv + 287 pages. \$129.00 (ebook available \$99.00)

(URL: <http://www.springer.com/us/book/9783319218540>)

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Claudia Pahl-Wostl directs the Institute for Environmental Systems Research at the University of Osnabrück and serves as cochair of the Global Water System Project. She has worked and published extensively on water, mostly in the context of the European Union. *Water Governance in the Face of Global Change: From Understanding to Transformation* reflects this experience. It is an extremely rich work, building on such sources as Elinor Ostrom, the new institutionalism, complexity theory, governance theory, and mixed methods of social research. She means to develop a theory for water governance to change from what she calls "technocratic approaches and instrumental management" in order to "foreground the 'human dimension'". A second major goal is to create a theory that describes under what conditions and in what way governance can adapt and transform.

After a chapter reviewing several recent trends that she will build on, Ostrom featured among them, she introduces the MTF, short for 'Management and Transition Framework' that is meant to lead us to her theory of water governance. I am now going to foreground a few of the many rich and interesting arguments she makes. But first, I would like to add a personal cross-cultural comment.

I worked in Austria frequently in the 1980s, reading, speaking and writing in German. I felt like I was reading a German book that had been translated directly into impeccable English. It has been well known for decades that academic writing in different languages from different national traditions is structured in different ways. The field that documents such differences is called text linguistics. During my Austrian days, German-speaking colleagues who could write fluently in English complained about how the dominant English editorial world rejected their submissions because they could not make sense out of a different way of structuring an academic argument. I had the same experience in reverse with two submissions to German language journals. One said, "Damit kann ich nicht anfangen", "I can't even begin with this". As another example, a European colleague would sometimes tease me that the first question from an American audience after a presentation was always, "Can you give me an example of that?"

I digress in the hope that I am reporting a useful empirically supported finding to warn American English speaking readers that this may be a rough reading ride. At least it was for me. But as a newcomer to the world of water governance looking for coherent frameworks, was it worth it? Most certainly. As a person who uses the same ingredients in his thinking on water policy, though in a different way, I admire, and learned from, how she put the pieces together.

So, back to the MTC theory. It would be futile to try and summarise the entire book here. But let me try and feature a few of the highlights that I think make it worth reading.

The core concept is 'governance', meaning "the social function of steering groups of people", in this case with reference to water. It is not just management, nor government, nor an organisational chart. It is a process involving many types of actors where path-dependence and threshold effects and regime shifts are normal events. Rather than traditional lab-like scientific analyses, MTC calls for a 'diagnostic' approach, one where the purpose is to find the configurations that explain the success or failure of a water regime to 'steer' towards positive outcomes and away from negative ones. A comparative case analysis is the method rather than the usual correlational approach. 'Context' plays a major role because water governance is shaped by, and in turn, shapes particular socioecologies. (There is an unresolved conflict in the book between context and calls for standardisation of the empirical framework generated by the theory.)

Two complementary approaches for analysis are offered. One is configuration analysis; the other is process analysis, a static and then a dynamic view of the same regime, respectively. A governance regime consists of four kinds of elements – institutions, actor networks, governance mode, and multilevel interactions. The elaboration of each of these elements in increasing detail continues for the rest of the book. Some of the arguments will be familiar to readers with a background in governance theory and the new institutionalism. Those who are not so familiar will benefit by her exposition. One theme that struck me was the importance of both formal and informal institutions, especially the connections between the two within the same regime. It will turn out that a tight relationship between them is critical for successful governance change.

Given the importance of learning and path dependence, she draws on a social learning model that includes single, double and triple loop learning, the latter being particularly critical for governance transformation. Another feature of her theory worth emphasising, especially for anthropologists, is that 'action situation' is the primary building block for looking at a regime. These real-time bounded units can then be interlinked to show regime-process and policy trajectories with interactions at different levels of political and geographical scales. The concept anchors another robust contemporary social science theme that she foregrounds, structure and agency and the dialectic between them. It also opens the door to ethnography.

It is her weave of these and other distinct threads of social theory and research methods into a theory of water governance regimes that makes the book so useful.

As one would expect from the title, she is primarily concerned with a theory of what she calls water governance dynamics. Once again the details of the discussion are beyond the scope of a review. One thread I found useful was her emphasis on the fuzzy boundary between the concepts of transformation and adaptation, on the one hand, and on how change in either case might be incremental rather than dramatic and sudden, on the other. The importance of the connection between informal learning cycles and formal policy processes surfaces here. It is informal social learning that produces new ideas and emphasises agency. The formal policy processes are where the ideas are codified into a new regime – the structure part. A tight connection between the two is crucial for responsive change.

Let me close this review with a long quote from p. 244 near the end of the book:

Empirical analyses have largely confirmed the hypotheses on the requirements for adaptive and integrated water governance and management. Similar characteristics are shared by both the adaptive as well as transformative capacity of water governance and management systems. Polycentricity, the combination of governance modes, and the integration of informal learning processes into formal policy settings contribute to the increased flexibility of governance systems and their capacity to respond to emerging challenges. Such broad guiding principles can, and must, be tailored to the context of individual countries. Emphasis needs to be placed on understanding the processes of change in policy implementation, to social and societal learning, rather than on creating blueprints for system architectures that often end up as simplistic panaceas for governance reform.

At the end of the book, almost tacked on as an afterthought, she adds a chapter about agent-based and participatory modeling. Ironically enough, I knew of Pahl-Wostl before I began my own work on water governance, but only as an agent-based modeler. Lately I have been arguing for their value in water contexts. I was grateful in doing this review to discover the depth of her involvement in water governance regime theory and how helpful her version of it is in my own work.

This is an important, if sometimes difficult, book at a time when environmental policy shows signs of change as we roll into the Anthropocene, and where inclusion of human social science perspectives is called for as part of the shift. My one complaint is that the cost of the book predicts less distribution than it merits. Springer should price it more competitively.

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