

Ethnographic conversations with Wittfogel's ghost: An introduction

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journals.sagepub.com/home/epc**Lukas Ley**

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Abstract

This theme issue re-engages the ghost of Wittfogel in ethnographically grounded conversations around the imbrication of water, power, and infrastructure. It examines social and political relations in ways that take their tensions and correspondences with water seriously, as Wittfogel did half a century ago, but in a less monolithic and totalizing manner. Instead, the contributions pay attention to the situated, partial, multiple, and open-ended encounters that (un)make these links. Together, the papers collected in this theme issue build a critical conversation around the role of water in configuring and reproducing power. Its major threads are the construction of authority through water, the social complexity of water relations, and the interrelationships between water, infrastructure, and political rule.

Keywords

Water, state, anthropology, ethnography, Wittfogel

Studies of the links between water management and social relations have long moved on from Karl Wittfogel's (1981 [1957]) theses of hydraulic despotism. His argument—that large-scale centralized water provision infrastructures would foster an autocratic political regime—has not only been disproven by archaeological and anthropological evidence, which suggest that autocratic regimes predate extensive water infrastructure, and that water provision may come with very different political arrangements (e.g. Davies, 2009; Obertreis et al., 2016), but it has also been rightly criticized for having an imperialist political agenda related to the historical backdrop of its inception—the Cold War—and

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Wittfogel's political biography (Peet, 1985). In particular, his simplistic, universalist take on irrigation has been refuted by anthropologists. Perhaps Clifford Geertz (1972) put the nail in the coffin when he asserted a situated sociocultural analysis of irrigation over an environmentally deterministic one.¹

In short, Wittfogel seemed done. Nevertheless, today, many of his ideas ghostly suffuse the growing corpus of literature focusing on water, infrastructure, and politics. While the hydraulic "assemblages" or "systems" that researchers describe today have little in common with "a centralized formation of power and knowledge – the hydraulic state" (Anand, 2017a: 12), it seems difficult if not impossible to ignore Wittfogel's theories entirely. Wherever social research is concerned with water, it comes across connections of some type or another between water control and political power, between hydraulic infrastructures and social relations, or between state bureaucracies and water provision. The ghost of Wittfogel is still with us. We believe that this ghost in fact proves useful in thinking through emergent forms of human engagement with water.

A look at current debates is revealing: in recent years, water has emerged squarely into the focus of public debate, for example in relation to the unprecedented rate of privatization of both water provision and treatment (Bakker, 2010; Swyngedouw, 2005). To the worry of some, these formerly deeply public projects, emblazoned in national maps and masterplans, are increasingly driven by new actor networks consisting of multiple, international stakeholders and corporate entities (see Strang, 2019). In other contexts, water becomes a public concern when the infrastructures designed to provide us with this vital matter fail. The Flint water crisis has underlined the role of the state in not only providing water but also mismanaging it (see Anand, 2017b). Furthermore, while some dams are being decommissioned, controversial dam development projects continue unabatedly in various regions of this world, often displaying the violent role that nation-states play in appropriating and managing (indigenous) water (see Evren, 2014).

Water scholarship has developed in close proximity to social studies on infrastructure, a topic resonating with Wittfogel's approach to hydrology (Graham, 2010; Larkin, 2013). To be sure, this scholarship has allowed to see infrastructure networks as "politicized assemblages of artifacts and practices" whose functionality may depend on acts of improvisation, "often beyond the bounds of markets and strict legality" (Graham, 2010: 10). As such, this scholarship too has moved on from totalizing accounts of infrastructure. It has become clear that the infrastructures that produce, channel, or divert drinking or irrigation water stand in a dialectical relationship with social, hierarchized arrangements. They are imbued with "tacit social, political and cultural conventions, which are sometimes quite literally built into their framings" (Carey and Pedersen, 2017). These dialectics are far from stable or predictable, in part because the social contracts and constructs supporting large-scale infrastructure gradually change or disappear. The term hydrosociality (Anand, 2011; Linton and Budds, 2014) has been proposed as a prism to look at the shifting relationality of society and water. Infrastructural development and hydrosociality are mutually imbricated, as individuals and collectives interact with water infrastructure at different scales and moments (Björkman, 2015). Hydrosociality and infrastructure studies share an interest in power. Erik Swyngedouw (2004) cogently captured their interrelation in the concept "flows of power," relating the political-ecological understanding of water to their processes of production.

Beyond these discussions, Wittfogel's ghost lurks around large-scale adaptive measures in the face of climate change and other human-made "monsters" (Tsing et al., 2017). Especially recent interdisciplinary debates on climate change adaptation are haunted by this ghost. Perhaps it required a planetary event as dramatic as climate change to reanimate the appeal

of gigantic infrastructural nature-producing projects, such as the Dutch “Room for the River” program, which have a clear resemblance to the irrigation systems that Wittfogel described as embodying despotic rule.

Ethnographic conversations

This theme issue re-engages the ghost of Wittfogel in ethnographically grounded conversations around the imbrication of water, power, and infrastructure. It examines social and political relations in ways that take their tensions and correspondences with water seriously, as Wittfogel did half a century ago, but in a less monolithic and totalizing manner (see Krause and Strang, 2016). Instead, the contributions pay attention to the situated, partial, multiple, and open-ended encounters that (un)make these links. Together, the papers collected in this theme issue build a critical conversation around the role of water in configuring and reproducing power. Its major threads are the construction of authority through water, the social complexity of water relations, and the interrelationships between water, infrastructure, and political rule.

We converse with Wittfogel along these threads not primarily by mustering alternative social theory, nor by amassing large samples of evidence in relation to his ghostly presence. Rather, we focus on concrete ethnographic cases of water struggles and allow these to speak with, about, and to Wittfogel’s argument. Instead of rejecting his influence on their work, authors critically and innovatively reflect on the legacy of the “hydraulic state.”

In emphasizing the value of ethnographic accounts for engaging the ghost of Wittfogel, we make two claims: first, anthropologists can offer nuanced accounts of power relations built into water infrastructures and regimes. Second, anthropologists have a special way of grappling with some of the critical issues of our time—neoliberalism, disaster governance, post-colonialism, etc.—that intersect with water. As social scientists with honed skills of self-reflexivity and intersubjective research, anthropologists are particularly well positioned to speak to these new amalgamations of power and infrastructure in various ideological contexts. Equipped with a special set of qualitative methods and trained in critical social theory, the ethnographers in this issue are tuned into the workings of power which allows them to provide in situ accounts of the intimate dialectics of society and water. When they draw on Wittfogel, they do so in a critical manner.

In anthropology, critical reception of Wittfogel is long in the making and mention of his “Oriental Despotism” is abundant. In their special issue “Exploring Water” (2015: para. 17), Rasmussen and Orlove argue that “much of the literature on agriculture and irrigation has implicitly or explicitly been in debate with Karl Wittfogel’s 1957 thesis of oriental despotism and the hydraulic-bureaucratic state.” By concentrating on irrigation, Wittfogel had touched on a long-term preoccupation of anthropologists, whose work on water politics in fact preceded his. Driven by cultural relativism, anthropologists crafted detailed accounts of water systems that defied Wittfogel’s universalistic claims. Strang (2016: 292) has further pointed to the discomfort that Wittfogel’s sweeping theories elicited among regional scholars. For example, Sinologists took issue with his claim that the “creation of major irrigation infrastructures had both required and enabled centralised forms of governance, supporting the emergence of hierarchical and despotic states.” In his comparison of Moroccan and Balinese irrigation, Geertz (1972) in fact omits Wittfogel entirely. Geertz is concerned with the integration of physical, social, and cultural factors into “quite distinctive ecosystems, ecosystems with human beings in them” (37).

Returning to Wittfogel is thus not a self-evident turn for anthropologists and not an easy task. But here lies the specialty of anthropology: grappling with its own conventions and

constant “turns” (Latour, 2014) in retrospect allows staying aware of the ghosts that haunt our practice as researchers and public commentators. And anthropology is committed to do this through ethnography. This theme issue hones the study of water and power as a layered, multivalent phenomenon through the use of ethnographic methods. As a discursive practice and located labor process (Moore, 2005), the use of ethnographic methods allows for a grounded analysis of emerging power structures built through and into water. An ethnographic perspective enables this issue to explore how subjectivities are produced in complex hydrosocial networks where multiple powers concur. By expanding the study of hydrosociality to “incorporate the rich insights of people at the receiving end of governmental schemes,” this issue avoids “attributing to these schemes a coherence they do not have” (Li, 2007: 283).

Water and authority

One central theme running through this collection concerns the relations between water flows and political authority. Geographers’ engagement with Wittfogel’s ideas has showcased their conceptual wealth (and pitfalls) and traced their influence on political theory. Engaging with the concept of hydrosociality (Linton and Budds, 2014), Banister (2014), for example, seeks to think “power relations in less rigid terms than those reflected in Wittfogel’s original concerns with water and hierarchy” (213). Conceptualizing hydrosociality as a nonlinear process, he analyzes historical data from Mexico to show that any “centralized authority is also deeply marked by what escapes it, by its ‘impotence’ and constant striving to catch up with the dynamic flux and flow of the world” (213). Importantly, Barnes (2014) has outlined how water itself is turned into a resource, shoring up social power, by everyday practices that shape its flows and appearance. Scholars working in the (loosely defined) field of geography not only grapple with the shifting shape of water but also the failure of structures designed to manage it. In a similar vein, Loftus (2009) applauds work that transcends Wittfogel’s environmental determinism.²

But the question of who has authority over water, and by means of water, is still with us, even if “water power, anthropologically speaking [...] emerges from effectively and credibly aligning a political project with the life-giving potentials of water” (Krause, 2018: 420) rather than from any direct causal link between water and power. Ethnographic investigation into how authority is wielded produces new insights, for example, regarding the influence of neoliberal restructuring on water management. In this issue, Astrid Stensrud observes that farmers in Majes, a town in the Arequipa region, southern Peru, depend on an extensive irrigation canal that channels water from the Condorama Dam at 4158 meters altitude down to the arid plains of Majes. For people living in Majes, the organization in charge of dam and canal controls the flow of water and thus decides over the life and death of both humans and non-humans in the valley. Yet, it is not an anonymous state that has life on a string in Majes. At closer inspection, the regime handling water is quite fragile, with overlapping and conflicting practices and customs. Stensrud sees in engineers an elitist group with significant social ties and obligations not only toward each other, but also to the water user groups they are serving. Authority over water and its users, in the Majes project, is—against all appearances—not only a technocratic affair, but embedded in various other relations, including the institution of *compadrazgo*.

Kirsty Wissing’s article also raises the question of authority. Her ethnographic study of the Volta River in Ghana reveals just how much Wittfogel’s theory relied on ignoring divine mastery of, and responsibility for, water. According to the Akwamu, the indigenous population residing at the site of the Akosombo Dam, the nation-state shares responsibility for

water with divine beings. Secular and religious discourses of responsibility clash in the context of the dammed Volta, and the rituals enact the river as a marker either of local religion and ethnicity or of national de-colonization and progress. In Wissing's analysis, the Akwamu, who entertain spiritual relationships with the river, "refract" state power through discourses of responsibility for water and people. In Akwamu narratives and rituals, local assertions concerning water and power emphasize the authority vested in the river that is passed on to particular people (especially chiefs and the Akwamu as a group), and maintained through mutual obligations of responsibility. This setup unhinges, without directly opposing, the state discourse of infrastructure and development, where leaders gain authority by harnessing the river's powers.

Both ethnographic cases throw into question Wittfogel's theories of a singular state exercising control over water. At the same time, they grapple with the fact that infrastructures do place communities in a direct relationship of power and dependence to a somewhat centralized authority.

The social complexity of water relations

Articles in this issue provide evidence that water relations are multiple, shifting, and unpredictable. Water, as a substance, and people's relationships with it come in so many forms that it is difficult if not absurd to construct mechanistic models of these relationships. This has a lot to do with the shifting form, materiality, and temporality of water, as Björkman (2015), Banister (2014), and others have shown. Rather, it makes more sense to conceive of society as formed around and through (dis)appearances of water, with an emphasis on the plural, and no illusion of a coherent whole.

In this issue, Etienne Delay and Jamie Linton analyze the social consequences of water engineering. They show that the form of water distribution resonates with the form of social institutions. When state interventions aiming to regularize water distribution produce different rhythms and tempos of water, they also have an effect on social arrangements. Delay and Linton borrow from Wittfogel's dialectic of water to describe how state attempts to control water flow in the French Eastern Pyrenees undo social institutions along the Têt River. Their ethnographic study of this process not only reveals the haphazard way in which the expertise required to control water flow is transferred from local to central authorities but it also aligns with a Wittfogelian stance on the negative effects of centralized water governance: the measures to ascertain water flow actually work to weaken accreted social ties between farmers by installing new forms of water use. Unlike Wittfogel's insistence on an increase in hierarchies, however, the state-sponsored transformation of irrigation infrastructure on the Têt has resulted in a lateral shift of relationships, from mutual irrigator interactions to a setup in which individual irrigators communicate with a state agency.

Matthäus Rest investigates the affordances of plans and unfinished water systems in Nepal, putting Wittfogel in conversation with recent literature on the techno-politics of water. In the Kathmandu valley, inhabitants have been promised relief from water scarcity through a new connection with a far-away water source. Nepal is among the countries with the highest hydropower potential in the world, but some Nepalese are facing dramatic water shortages. This disconnect between the residents of the Kathmandu valley and the country's resources speaks volume of the different potentialities of water. The social complexity and paradoxes of water relations are more often than not built into the infrastructures designed to make water appear or disappear. Simultaneously, the physical and political landscapes of Nepal, coupled with the capitalist logic of large-scale construction projects, keep the completion of the water conduit an elusive undertaking. Rather than strengthening a

technocratic state administration, this water infrastructure project seems to foremost illustrate the difficulties of managing water, and the danger of making large-scale promises.

Water, infrastructure, and political rule

The third crosscutting theme of this collection concerns the role of infrastructure in mediating between water and political power. Here, too, we can draw on the work of many other researchers, who have implicitly or explicitly engaged with Wittfogel's ghost. For example, Limbert (2010) has demonstrated that in Oman, neither traditional nor modern water infrastructures have led to the centralization of political power, emphasizing instead the deeply meaningful aspects of particular kinds of infrastructure, and how they figure in discourses and practices of nostalgia, neighborliness, and piety. Ley (2018) has shown how, in the Indonesian city of Semarang, river normalization has become an "infrastructural commonplace through which the state and residents seek to define urban life." Instead of considering water infrastructure as a neat outcome of national schemes, he examines how nationwide norms, urban imaginaries, and acts of infrastructural caring co-constitute rivers. Anand's (2017a) ethnography of Mumbai's water system also references Wittfogel and considers the possibility of large-scale infrastructural assemblages emerging in the face of climate change, wondering in whose interest such infrastructures would work. In other words, it invites us to consider the possibility of what could be called infrastructural despotism. Similarly, the editors of a recent special issue on "Water, infrastructure and political rule" (Obertreis et al., 2016: 169) suggest that infrastructure and politics are related in new ways, pointing to "new avenues of connectivity." Revisiting Wittfogel's "hydraulic hypothesis" in an explicitly interdisciplinary effort, they convene water researchers from different scholarly backgrounds to query how infrastructure and political rule are understood today. Here, too, the specter of networked and planetary infrastructures (Masco, 2017) that monopolize power, capital, and labor force looms large. This is particularly interesting to us: while the idea of a totalitarian hydraulic state has been refused, the idea of a monstrous agency in charge of vital infrastructure seems to still motivate theorization.

William Wheeler, in this issue, discusses the hydraulic hypothesis in relation to a case from the former Soviet Union, a state which Wittfogel did not cover in his historical material on "Oriental despotism," but against which most of the polemic of his work was directed. Focusing on the Aral Sea in Kazakhstan, he shows that while the Soviet state did strengthen its influence in the region through irrigation infrastructures, this apparatus was much less in control of water than it appeared, which had severe ecological and socio-economic repercussions. By closely engaging with the life stories of three Aral'sk men, Wheeler then demonstrates that state control via irrigation infrastructures is not a universal pattern, but situated in people's particular biographies, which engender different relations to both the state and its infrastructures.

Stensrud, in turn, investigates the effects of deregulation policies on water infrastructure. The Peruvian state, while considering water as a public property, also pushes its neoliberal agenda through water privatization. Stensrud's material on the Majes irrigation scheme suggests that a centralized hydraulic state and neoliberalization can momentarily coexist, but that this results in a fragile water regime, with overlapping and conflicting practices and customs. Importantly, engineers overseeing this project had been able to exercise power by virtue of their position in established informal hierarchies. Their power was embedded in local social arrangements with water infrastructure. How will the neoliberalization of irrigation affect this web of relationships?

Delay and Linton's case study of state-controlled water metering and distribution demonstrates how the French central state materializes in the Pyrenees by introducing new water technologies, measuring, controlling, and orchestrating water flows. The new technologies socially distance farmers from their land and from water, and corrode communal ties. Delay and Linton argue that this delegation of authority to the state coincides with a process that turns farmers from co-managers into consumers of water.

Through these three threads—the construction of authority through water, the social complexity of water relations, and the interrelationships between water, infrastructure, and political rule—our theme issue converses with Wittfogel's ghostly legacy in the light of recent ethnographies. In the process, we find that all three central terms of the analysis—water, infrastructure, and power—have analytically shifted since Wittfogel's writing. *Water* is no longer seen to play a role only due to its “tendency to gather in bulk” (Wittfogel, 1957: 18), but also in relation to many other tendencies, including its variability, propensity to dissipate or evaporate, malleability, and eroding force. Therefore, analyzing the workings of power through water must take into account what water does in specific contexts and how it co-configures politics. For example, in cases where water features as a far more volatile substance (see Björkman, 2015; Fontein, 2015) than Wittfogel's controllable flow, its management renders different political configurations than the hierarchical state of Oriental Despotism, where politics are much more improvised and insecure (cf. Krause, 2018). Similarly, *infrastructure* has, since Wittfogel, become not only a topic of social and cultural analysis, but also an idiom to address much more than irrigation canals or roads (e.g. Harvey et al., 2017). Where economic institutions, administrations, and knowledge, alongside vegetation and soil have been analyzed as infrastructures, the scope of infrastructure in configuring power has widened considerably, taking into account the myriad human and more-than-human participants involved. Finally, our understanding of *power* itself is significantly more de-centralized than in Wittfogel's time, for instance through the work of Foucault, Gramsci, and others (e.g. Ekers and Loftus, 2008; Loftus, 2009). This widened understanding of power enables a novel understanding of the emergence, contestations, persistences, or declines of domination and political rule: these can be reconfigured not only by new forms of water management, but also through infrastructural, other-than-human and, indeed, water's own agencies. In the light of these developments, (political) power can no longer be seen as a domain of humans alone.

The papers gathered here represent a regionally diverse collection of scholarship that enriches traditional Wittfogelian concerns through a range of theoretical interventions, empirical findings, and methodological approaches. They nonetheless share a commitment to engaging with water control and infrastructure as a fundamentally political project. As Ekers and Loftus (2008: 713) argue, the study of urban water landscapes should build on the immanent critiques at work in people's lives and everyday practices, as “it is from within these contradictions and tensions that new societies might be envisioned and fought for.” The conversations that this issue offers make these contradictions and tensions tangible by analyzing ethnographic material and carefully putting fieldwork data into a dialogue with theory influenced by Wittfogel. What emerges is an understanding of the relationships between water and power that is both more modest and more wide-ranging than Wittfogel's. On the one hand, water, infrastructure, and authority do stand in a close relationship, but causation is neither as mechanistic nor as unidirectional as suggested by Wittfogel. On the other hand, this field of relationship is not only applicable in “hydraulic societies” but plays a critical role in a host of other social contexts, too.

We must continue to critically observe how attempts at controlling water and controlling people coincide and reinforce each other, while paying attention to the specific social and

material contexts that shape this interaction at specific times and in specific places. Therefore, we need a hydrosocial theory that takes into account the unstable materiality of water, the fact that society and politics are not limited to humans, and an understanding of power that goes beyond standard repertoires. We believe that this theme issue provides another step into this direction and are looking forward to the further discussion it will inspire.

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Notes

1. Yet, as Kelly (1983) reminds us, “patterns of social organization are not derivative of environmental absolutes and engineering scale, nor are they easily reflexive of internally consistent cultural systems” (884). From a contemporary perspective, Geertz’ analysis reduces water irrigation to an expression of sociocultural dynamics. Although he is not committing “geographical determinism,” he is certainly guilty of “savage slot”-thinking (Trouillot, 2003)—anthropology’s tendency to study the “primitive” while seeing in it the antithesis to the West “and sometimes its promise” (Robbins, 2013: 449).
2. Reviewing scholarship that uses a political ecology lens to account for drinking water shortage in Southern countries, Loftus (2009) suggests geographers also engage with a Gramscian framework of power and feminism.

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