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RESEARCH ARTICLE



# The political ontology of collaborative water governance

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## ABSTRACT

This article examines the various definitions of, and analytical approaches to, collaborative water governance (CWG). While the concept's usage has increased over the past decade, there lacks any deep engagement with the concept of the political at the heart of CWG. This article argues that contemporary approaches to CWG risk emptying the concept of its utility and coherence. Correcting this deficiency requires a focus on the social and ideational constructions of water. This will strengthen future collaborative water arrangements and enable deeper appreciation of the ways the political makes and remakes what is possible in water governance.

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## Introduction

Collaborative strategies of governance are often seen as modern necessities for sustainably managing water resources. Global water organizations including the United Nations Environment Programme (2007), the Global Water Partnership (2014) and the Water Governance Facility (2015) all advocate the pursuit of collaborative water governance (CWG). This reflects broader trends in the governance literature that heavily promote collaboration rather than other governance forms such as hierarchical control and community-based governance. According to Thomson and Perry (2006, p. 20), “devolution, rapid technological change, scarce resources, and rising organizational interdependencies” are the drivers of this increasing trend towards collaboration.

With the retraction of the state from centralized decision making over environmental resources, a seemingly broad consensus has formed that formal collaboration between state and non-state actors and across separate spatial and temporal scales is desirable (Arts, 2005; Dukes, Firehock, & Birkhoff, 2011; Newell, 2008). Instead of central control exerted by state and regional governing authorities, the creation of broad governance coalitions comprising many actors with the authority to create and influence decision making is meant to establish legitimacy and develop better-informed policies for the sustainable management of water resources. It is thought that collaboration brings with it the best chances of success, defined in terms of environmental stewardship, economic development and social egalitarianism. Consequently, collaborative governance has come to occupy a prominent place in water resources management,

and should now be considered a primary method through which scholars and practitioners pursue equitable water arrangements.

In terms of material effects, the pursuit of collaboration requires the development of a broad range of institutional arrangements. However, these arrangements are meant to interpret and then operationalize a concept that is often left under-examined. Indeed, CWG has been increasingly referred to but is frequently expressed in contradictory and imprecise terms, with a wide array of efforts categorized as ‘collaborative’. There is a tendency in the literature to equate terms such as collaboration, partnership, network and coalition.<sup>1</sup> While such a plurality of approaches may lead to innovative and adaptive policies that represent particular contexts, it can also be used to mask misunderstandings or to satisfy donor or government requirements through token illustrations of ‘collaboration’. Beyond that, it also voids CWG of the politics that shapes its development and the outcomes of collaborative efforts. The effects can be significant: they risk reifying a singular ontology of water as a strategic resource to be controlled and managed to reproduce existing social relations and structures.

Both water and the ways we try to control it are never free of deeply political social processes. Viewing CWG abstractly, as a solution to predominantly technical and managerial problems, overlooks the social, and therefore political, processes that determine what water is, and what specifically needs protection in the quest for water security. In this sense, collaborative approaches to water governance generally hold, in both theory and practice, a thoroughly modern view of water that attempts to “tame, control, and discipline” nature (Kaika, 2006, p. 276). Authors who seek to further contribute to this burgeoning literature would do well to understand the ways in which water and society are made and remade via highly varied constellations of power that create the conditions of possibility for water security.

It is useful therefore to undertake a sustained review and a critical examination of the concept of collaboration in water governance. Doing so is likely to improve conceptual clarity, lead to more rigorous studies of collaborative action over water resources, and hopefully lead to more just and democratic pursuits of water security.

The purpose of this article is twofold: first, to produce a comprehensive, manageable survey of the literature related to a central concept in water resources management, CWG; second, to produce a critical analysis of the CWG literature in order to improve its conceptual clarity and to facilitate its equitable and effective application in different contexts around the world. The article therefore explores the concept of collaboration, together with the reasons for its continued analytical confusion in the context of ongoing water insecurity in much of the world. It argues that the conceptual incoherence of CWG can be partially explained by confused or absent understandings of *the political* – the specific ontologies of water that are utilized in the process of establishing governance arrangements.

Setting up water collaboratives without a deeper political reflexivity may cement inequitable power relations and water insecurity, even in the midst of seemingly governed spaces. As Helen Ingram (2011, p. 242) puts it, “The art of politics must come back into the discussion of water if change is to occur.” The “art of politics” in this instance is emphasized via a focus on the ontology of water, the contested questions about what water is. Such an approach is justified given the increasing frequency with which water governance approaches are explicitly (and implicitly) defined as

‘collaborative’ by scholars and practitioners. A scholarly inquiry is needed that examines how the political interacts with the various definitions, methods, scales and institutional arrangements that exist under the broad rubric of CWG.

The first section of the article details the current state of CWG research. It consults a broad range of literature to detail the varying scales, scopes, definitions and meta-theoretical approaches to CWG. It shows that the concept of collaborative governance is often expressed in different ways across and within disciplines. The identification of the multiple frames of CWG offers scholars and practitioners insight into both the possibilities and the limitations of the concept. The second section of the article interrogates the ontology of water as a hydrosocial process. It illustrates the ways in which water is understood as something to be ‘governed’ according to identified collaborative arrangements. It also provides some insight into the constitutive role that ontologies of water play in determining the characteristics and strength of these collaborative arrangements. This particular insight presents an argument in favour of viewing collaborative governance less as a systematic blueprint with specific characteristics, and more as an inherently political and processual form of action, which may or may not achieve sustainable water management. Collaboration is much more than devolved decision making; it includes a wide array of material and communicative processes that reflect highly contested political spaces. The final section explores how CWG relies upon an unquestioned singular ontology of ‘modern water’, which is reflected in the quest for ‘jointness’ in governance.

### **Collaborative water governance: a review**

It is difficult, if not impossible, to acquire a fully formed picture of a conceptual frame through literature reviews. They are by their very nature elastic and ill-fitted to systematic ordering. In particular, it is difficult to gain a firm handle on the disparate ways in which collaborative governance is invoked across a range of disciplines, subdisciplines, policy documents and official government reports. Beyond the difficulty of traversing such a wide array of literature, there are also struggles in accurately defining the parameters of CWG.

It is debatable whether it is possible to accurately identify the literature that relies upon an understanding of CWG. This speaks to larger questions about the concept of collaborative governance itself – how it is defined, how it is used, and whether it even represents a definable approach, sufficiently separate from other governance constellations such as nexus approaches (Benson, Gain, & Rouillard, 2015), adaptive governance (Huitema et al., 2009; Zeitoun, 2007), cooperative governance (Tapscott, 2000), grass-roots ecosystem management (Weber, 2003), polycentric governance (Skelcher, 2005), Type 2 partnerships (Stewart & Gray, 2009), co-governance (Dodson, 2014; Tsujinaka, Ahmed, & Kobashi, 2013), reflexive governance (Voß & Bornemann, 2011), nodal governance (Holley, Gunningham, & Shearing, 2011), multi-actor environmental governance (Newell, Pattberg, & Schroeder, 2012; Stewart & Gray, 2009), and multiscale governance (Morrison, 2007).

A brief literature review reveals that the academic literature examining CWG has been growing. A search of the Web of Science database using the term ‘collaborative water governance’ revealed a total of 157 articles published between 1999 and 2015. The

last five years show a marked increase in the number of articles on CWG, with 81% (128/157) of all CWG articles published between 2009 and 2015.<sup>2</sup> Similar findings can also be observed with related concepts, including ‘collaborative watershed management’, ‘multilevel water governance’, ‘adaptive water governance’ and ‘polycentric water governance’. Only adaptive water governance has attracted more recent attention than CWG, with 339 articles since 1999, 88% of them since 2009.

The results also indicate that articles dealing with CWG have arisen from a variety of disciplines. The majority of articles (59%) are listed as environmental sciences ecology, but all told, 15 research areas are represented, including public administration, geography, engineering, geology, and business economics. Surprisingly, there remains a dearth of literature from political science on the subject, though this may be partially explained by the limitations of the Web of Science database, which is lacking overall in its representation of social science literature.

The overall picture that emerges is that CWG has attracted increasing scholarly attention and that this attention is concentrated heavily in environmental science but has also spread out to include a variety of disciplines. The disparate range of studies has led to some conceptual confusion, including the use of multiple definitions and shifting scales of study (McNamara, 2012). In a sense this reflects a growing interest that should be encouraging, and epistemological diversity should not be problematic on its own. That said, one gets the sense that the existing range of literature is suffering from the effects of its own incoherence and incongruity. The rest of this section will review the emergence of CWG as an evolving concept, paying special attention to the competing frames of understanding.

## **Defining collaborative water governance**

How one defines CWG is important. Definitions reflect implicit ontological assumptions and therefore set the limits for coherent analysis. They are crucial in theory building. This section examines the constituent parts of CWG.

Collaboration is now seen as an imperative within public organizations (O’Leary & Blomgren, 2009). The central components of collaboration – inclusivity, holism and representation – are meant to incorporate multi-actor options, views and resources in combatting collective-action problems. These stand in contrast to other governance approaches that emphasize command-and-control, top-down and managerial styles (Leach, 2011; Sabatier, Weible, & Ficker, 2005). Indeed, collaboration reflects a turn away from other forms of inter-organizational activity such as market-based interaction and hierarchical control, which can often be ineffective in resolving the complex shared problems of water management.

The “collaborative turn” in water governance emphasizes values of bargaining, negotiation and compromise (Imperial, 2005, p. 286). For its proponents, these political values can produce policy tools that address water impacts in a cost-effective way (Muñoz-Erickson et al., 2010). According to von der Porten and de Loë (2013, p. 151), collaboration is responsible for: contributing to more effective resolution of conflicts; reflecting an increasingly networked society; improving stakeholder relations; addressing multifaceted problems; and responding to the deficiencies of approaches that focus on centralized government control and technical knowledge. It also

represents the continued acknowledgment that economic development and environmental stewardship are not inherently conflictual goals.

Watersheds rarely follow political borders, and even when they do, the actors involved often hold different and competing interests. These interests may be suppressed or subsumed under central control in some instances, but it is increasingly acknowledged that doing so rarely succeeds in sustainably managing water resources in the long term. Thus, conventional governance approaches in which each managing agency implements policies based upon its legally prescribed mandate, often with little meaningful input from outside stakeholders, has given way to more collaborative approaches. These approaches are broadly conceived but are generally based upon bottom-up applications of negotiation, compromise, problem solving, and sustained interaction between public governing bodies (of varying scale) and non-governmental actors. This interaction is intended to better marry the social and ecological needs of the defined watershed.

Despite collaboration often being invoked as a new, necessary component of modern governance, the concept and its associated processes remain poorly understood. Huxham (2000, p. 339) writes, “There appears to be no consistency between practitioners or authors ... so the terminology remains confusing.” Beyond the inconsistencies in the applications of the term, studies in collaborative governance have also been produced that either fail to provide any attention at all to its definition (Jin, 2013), or ignore the properties of collaboration that exist across different and similar sectors (Wondolleck & Yaffee, 2000).

Collaborative governance is defined by Chris Huxham (2000, p. 339) simply as “governance that involves people in working relationships with those in other organizations”. Chris Ansell and Alison Gash (2007, p. 544) evaluated the various forms of collaborative governance that stretched across policy sectors and developed a more formal definition and model. They describe collaborative governance as “a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets.”

Ansell and Gash’s definition sought to overcome previous iterations of the concept that were more expansive and therefore lacked utility. By restricting their definition, they meant to increase the comparability between different cases and avoid some of the pitfalls associated with segmenting different forms of collaboration. By also taking stock of the existing literature and pursuing a strategy of “successive approximation” they developed a model of collaborative governance that reflected the iterative processes involved in pursuing complex collective outcomes negotiated by a variety of different stakeholders. But Ansell and Gash’s approach has been criticized as being too restrictive and reflective of the tendency among collaborative governance scholars to rely upon amorphous definitions and inconsistent applications (Emerson, Nabatchi, & Balogh, 2012).

The view taken here is that collaborative approaches to governance are better understood less as strict blueprints, and more as general strategies that can be used to help solve complex sets of interrelated processes (Sabatier et al., 2005). Specific characteristics may differ across regions and cases, but the general components of collaborative governance remain in place. According to Sabatier et al. (2005), these

components include bottom-up processes such as face-to-face negotiations and information exchange among a variety of interested governmental and non-governmental stakeholders with relatively consensual decision rules.

Water governance has been characterized as “perhaps the most important topic in the water community in the twenty-first century” (Lautze, De Silva, Giordano, & Sanford, 2014, p. 25). Given the unique problems related to ensuring access for human, commercial and ecological needs, water presents a particularly wicked problem. As Ostrom et al. have noted, once water is organized as a common-pool resource, it connects people socially, economically, politically and ecologically (Ostrom, Burger, Field, Norgaard, & Policansky, 1999). Any action within a common pool affects all those sharing the resource, and as a result governance becomes distributed across space and time. The state, being the primary political unit in the contemporary Westphalian system, tends to sequester the majority of the rights to the resource, designating it as state property, with a small portion being generally left as private property. The state then becomes primarily responsible for controlling the resource and distributing it so that it contributes to the national advantage (Rogers & Hall, 2002).

However, this conventional system of common-pool water governance is undergoing considerable transformation. Formal, semi-formal and informal governance networks are emerging in both developed and developing nations to further complicate the use and distribution of common-pool resources. Given the incongruence between hydro-political boundaries and the increasing reorientation of the state away from its position as a central governing authority of environmental (and other) resources, it is not surprising that more complex governing systems involving multiple actors at varying scales have emerged. These water governance systems often comprise various government departments (from the state level down to municipal and tribal authorities), businesses, NGOs and academic institutions.

The relationship amongst these actors within complex governing systems can be categorized in a number of ways from adversarial to collaborative, but often exhibit characteristics of multiple elements. However, the growth of collaborative forms of water governance should be seen as reflective of an increasing awareness amongst water users that the joint benefits accrued through use restrictions that are effectively governed will outweigh the associated costs (Ostrom, 2009). In other words, when it is perceived that the expected benefits of managing shared water resources exceed the costs of investing in rule- and norm-based restrictions, then collaborative governance regimes are likely to emerge.

The types of governance systems that have built-in mechanisms of inclusion, trust and communication are seen as better positioned to keep their promises and distribute the costs and benefits in a fair and efficient manner. In this way collaboration between shared water users is meant to mitigate the tendencies of individuals in a common-pool resource regime to focus on their own benefits and costs at the expense of the total benefits and costs for a group. As Ostrom, Burger, Field, Norgaard, and Policansky (1999, p. 280) noted, “Participants are more likely to adopt effective rules in macro-regimes that facilitate their efforts than in regimes that ignore resource problems entirely or that presume that central authorities must make all decisions.”

## Knowing collaborative water governance

While there is a broad agreement forming that joint management within water governance systems offers robust opportunities for effectively responding to the growing crises of water quality and quantity, deep questions remain. It is far less clear exactly what CWG refers to, how it is operationalized, how its success might be measured, and the ways in which the political intersects with the concept. Indeed, the literature on CWG indicates that discrepancies remain over its definition, its distinction from other forms of water governance, the appropriate scales of analysis, and the roles of individual actors within both formal and informal governance arrangements. Of course, these types of differences should be expected of those engaged in the literature. Yet, there is a disconcerting tendency to uncritically label disparate processes and institutional arrangements examples of ‘collaborative governance’.

In many respects, the growth of collaborative governance as a paradigm is reminiscent of the shift from integrated water resources management to (in capitals) Integrated Water Resources Management, or IWRM (Giordano & Shah, 2014). Through its continued conceptual fuzziness and the ‘boxing in’ of alternative frameworks, many proponents of CWG are unwittingly re-establishing a problematic faith in apolitical water ontologies that can be mapped onto almost all water governance problems.

For collaborative governance to evolve into a truly significant paradigm around which to structure watershed management, it is not sufficient to simply produce an agreed-upon definition or framework; some effort must be made to confront the politics at its heart. The fragmented and competing nature that characterizes so much of the literature is amplified by the conceptual silence surrounding the politics that lies at the heart of CWG. This is not to suggest that there needs to be a struggle for uniformity in the literature. But the avoidance of direct engagement with the political nature of collaborative governance may be partially responsible for the tendency of the literature to focus on smaller, more parochial concerns, including planning strategies (Margerum, 2011), outcomes (Rogers & Weber, 2010), and local knowledge production (Taylor & de Loë, 2012; Taylor, de Loë, & Bjornlund, 2012). Of course these are important additions to a burgeoning literature. However, there is a clear need to buttress these studies with deep reflection on how the concept of the political flows throughout CWG regimes. What follows, then, is a critical assessment of the concept of CWG as it currently stands, with a particular focus on bringing forth the political nature of the term and the various processes that characterize it.

## Bringing the ‘political’ into collaborative water governance

The recent uptake in faith in CWG is not a neutral or natural phenomenon but reflects a complex web of interests, ideologies and power. As Molle (2008, p. 147) points out, “nirvana” concepts and models (like CWG and IWRM) “are rarely neutral and embody causal assumptions about how societies work and normative beliefs about how they should work, as well as conceptions about international relations, governance, or how to exercise power”. The overwhelming focus of the CWG literature has lacked the critical self-awareness to question the importance of the politics of embedded reality. In other words, CWG as it stands now relies upon unexamined assumptions about the

ways power and governmentality work to produce and reflect social relations over water, even within such a seemingly benign and avowedly progressive approach. The effects of this are far from negligible, as they work to condition the understandings and discourses of water.

It should be mentioned that studies that focus on variety of instrumental concerns – the various processes of collaboration, which collaboratives succeed or fail, the recommended operational guidelines for public managers to follow, etc. – serve certain influential functions related to the design and implementation of water governance institutions. They also reflect deeply political processes, and they create political outcomes. To bypass critical interrogation of the concept of the political embedded in such collaborative processes risks the continued promotion of managerialist and regulatory approaches that often reflect and reproduce existing social relations and structures. The danger is that they also fail to properly account for how water security and our attempts to manage it reflect “socio-natural interactions and multiple forms of contestation” (Rossotto Loris, 2014). CWG may appeal as a type of holistic response to water degradation, and it may indeed offer useful strategies for overcoming barriers to integrated, cooperative water management. But without recognition of the deeply political processes at its heart it is likely to remain wedded to flawed and skeletal solutions that do little to transform human impacts on insecure water resources.

There are a number of ways that the political nature of water can be expressed. One prominent way comes from the concept of the hydrosocial. As Schmidt (2014) explains, the hydrosocial has multiple connotations. One view (Turton, BaBrbara, & Leestemaker, 2001; Turton & Meissner, 2003) characterizes it as an unwritten “contract”, in both Hobbesian and Lockean forms. The contract is enacted when individuals are unable to fulfil their personal water needs. This enables centralized governments to assume this responsibility and thus develop the institutional and engineering architecture needed to fulfil the public desire for adequate water supply and environmental sustainability. This view emphasizes the role of sovereignty and embedded norms of governance in placing water within a specific social-political space.

Another view characterizes the hydrosocial from critical-ecological perspectives. According to this interpretation, the hydrosocial counteracts the material framings of water, including the hydrologic cycle, which is the dominant means of representing water flows. In contrast to the material frames, which separate water from its social relations, the hydrosocial emphasizes the ways water “is made known and the power relations that are embedded in hydrosocial change” (Linton & Budds, 2014). Focusing on the hydrosocial reveals how society shapes and is shaped by water, materially and discursively. It “describes the process by which flows of water reflect human affairs and human affairs are enlivened by water” (Linton, 2010, p. 68). This version of the hydrosocial is explicit in denying the pure physical materiality of water; water is not simply H<sub>2</sub>O, but moves through multiple spaces and takes multiple forms. In other words, “the materiality of water exceeds its physical properties” (Bear & Bull, 2011, p. 2263). The pivotal point here is that water is an actant: it has an active, dynamic role in shaping social relations, while at the same time expressing and embedding those same social relations. From this perspective, CWG, like all forms of water governance, both creates and reflects contestations over the ontology of water.

Various academics have accentuated different ways in which the sociality of water is expressed in different settings. Swyngedouw (1999) excavated the central role of water politics and engineering in Spain's modernization process as part of the broader socio-natural production of Spanish society. Walker, Whittle, Medd, and Walker (2011) looked at floods as "more-than-water", existing as socio-natural-technical assemblages. According to their analysis the materiality of water, in the form of floods, interacts with fuzzy and socially complex spaces to open up and contest its boundaries. Linton and Budds (2014) detailed a relational-dialectical vision of the hydrosocial cycle that acknowledges the presence of different waters in different social assemblages, demonstrating how water and society make and remake each other over space and time. Bouleau (2014, p. 2), using the different management practices of the Seine and Rhône Rivers as case studies, showed that the concept of the hydrosocial "highlights the material and ideological circumstances that allowed some water scientists and managers to produce water-related concepts and categories that they later heralded as universal". These and many other academic studies point to the co-production of science and social order through the ontological question of what water is.

Perhaps unsurprisingly, the ontological question of water has not been addressed in the CWG literature. Such discussions are not for everybody! The overall absence however remains a significant oversight, given how important it is in establishing a credible understanding of how water governance is imagined, understood and performed. Interacting with the ontology of water – by asking what water is – allows a deeper interrogation of its inherent sociality and better understanding of how CWG becomes predominantly framed in technical, apolitical terms. The ontological foundations that produce modern understandings of water function to facilitate specific governance constellations, which in turn produce and reify modern belief in water. In other words, water and water governance co-determine each other.

Indeed, a growing body of literature examines the thoroughly modern relationship between water and society (Bakker, 2012; Budds, 2009; Kaika, 2006; Strang, 2004; Swyngedouw, 1999) As Jamie Linton (2010) has argued, water is a process rather than a thing: it is what we make of it. By imagining it in such a way, water governance becomes less of an outside force imposed by human actors on a fixed material resource; it is part of the construction of water itself. This means that CWG must be viewed as part of the broader construction of 'modern water'. Linton (2010, p. 11) characterizes modern water as a "hegemonic construction" that divorces water from the social and ecological worlds and presents it as a knowable, natural biogeochemical fact. By conceiving water and society as fundamentally distinct, it is possible to imagine manipulating water without social consequences (Linton, 2014). The effects of this are the privileged advancement of ideas of water as something intellectually and practically abstract and therefore as something to be technically controlled and expertly managed. The interventions by government, increasingly defined by 'collaboration' with other sectors and premised upon data generated by epistemic communities of accepted water experts, are responsible and reflective (i.e. co-constitutive) of modern values of water.

CWG, despite its varied definitions and forms of practice, demonstrates, reinforces and disciplines modern understandings of water. Collaboration, now touted as one of the primary pathways to water security, is, by virtue of its apolitical tendencies, bound to an understanding of water as a fixed material resource that requires measurement, coordination and integration.

Collaboration requires a shared understanding of what water is and what it is meant to do. Without shared perceptions and discourses, collaborative processes are unlikely to develop into discernible forms of governance; or if they do, they will be ineffective, or incapable of addressing the specified water issues. There is at the outset the need to identify a water ‘problem’, generally identified in terms of degraded quality and/or limited quantity that impacts the measured and defined human and ecological services. The identification of these water problems requires the employment of various concepts, technologies and socio-technical objects, including for instance moral, spiritual and biological appeals to human hygiene, and the dams, pumps, purifiers and canals that seek to regulate and manage the resource. Once water problems are defined and demarcated (in relation to the underlying ethical understanding of what water is and is for), a suite of responses can be devised, ranging from the individual to the collective.

Political responses, in the form of governance arrangements, are generally considered the most important in terms of obviating water crises and building sustainable management of water resources. CWG, as an ascendant form, is meant to help overcome the deficiencies of previous iterations of water management. And it may in fact lead to more efficient, equitable and sustainable approaches to governing water. But it too relies upon distinctly modern political ontologies of what water is, whom it is for, and how it should be used. Its very nature is a political act, or more accurately a compendium of political acts.

Recognizing this allows the creation of new, potentially emancipatory forms of water security (Harrington, 2015). From the perspective of political ecology, the desire to politicize environments is the first step in changing them (Loftus, 2009). The final section of this article examines some ways in which the concept of CWG, partly through omission, relies upon and defends a specific political ontology of water.

## **Collaborative governance and modern water**

According to Imperial (2005), collaboration involves a type of network relationship, where individuals and groups conjoin in structures of interdependence. The determinants of collaboration – whether it is pursued and who is invited into a network relationship – are understandably complex. For water governance to be deemed truly collaborative it should include the participation of ‘stakeholders’ being deemed relevant and getting invited. Who determines a stakeholder’s relevance and who is invited to subsequently participate in formally defined collaboration requires a degree of power and influence that some affected groups and individuals may lack. But beyond the often-politicized processes that determine which individuals and groups are even invited to collaborate, there must exist a shared understanding of what water is in the first place.

In this respect, the hydrosocial dialectic described earlier is instrumental in determining the forces driving CWG. Collaboration requires a shared ontological understanding of water, to determine what exactly is being negotiated. In other words, a shared language of water must be present for collaborative practices to be envisioned and undertaken. In this sense, the processes of collaborative governance often reflect modern ontologies of water in terms of defining the resource in abstract terms,

measuring it in empirical terms, and regulating it according to the specified demands of the socio-technical state.

Undoubtedly, collaborative governance reflects the perceived deficiencies of previous strategies of water management. Or, as Stephen Born and William Sonzogni (1995, p. 168) note, integrated and collaborative water management is “a response to much of traditional natural resources management, which has been largely reactive, disjointed, and for narrow and limited purposes”. The strategic rationale offered in support of collaboration is however part of a larger, modern paradigm of regulation, management and governance of natural resources. In particular, collaborative governance, in part through the avowed intention to engage disparate voices and approaches in water management, co-constitutes modern water, not least through the desire to singularize the resource – to make it whole. Both modern water and CWG are premised upon holism and interconnectivity.

One of the most important ways to conceptualize this shift is to focus on the transition from the multiple forms of water found in premodern paradigms to the singular idea of water, understood as H<sub>2</sub>O, that characterizes modern water (Budds, 2009). This transition from ‘waters’ to ‘water’ encompasses a complex array of historical, economic, sociological and political manoeuvres that have been occurring for centuries (Hamlin, 2000). Whereas the history of water shows that people have viewed the substance in myriad ways, depending on the particularities of culture and place, a paradigm shift towards modern water occurred that emphasized the sameness of water (Hamlin, 2000; Linton, 2014). The abstraction of water from its constituent social and historical parts to create a naturalized, measurable resource is part of the move to singularize water across space, time and culture. The increasing trend towards collaborative governance reflects and consolidates these manoeuvres by measuring, valuing and regulating water according to the defined necessities of the modern age. This includes employing a specific type of hydrological expertise to define water problems primarily as problems of supply or quality, and leaving control over water resources in state hands (Linton, 2014). This singularity is part of the modern foundation upon which CWG is built.

Indeed, the notion of singularity is reflected in the quest for ‘jointness’ that characterizes collaborative governance. Eugene Bardach (1998, p. 8) defines collaboration as “any joint activity by two or more agencies that is intended to increase public value by their working together rather than separately”. For him, and many others, the task of collaborative governance is to create and sustain jointness in order to build new sources of public value. This requires working together and pooling resources, so as to more effectively achieve shared desires. Along the way, efficiency, synergy and complementarity are sought, as they are the perceived benefits of singularity. These buzzwords, which are found frequently in collaborative governance documents, also reflect a deeply political ontology of water.

In the quest for singularity and jointness embedded in collaborative governance, water is captured as an object of government, and alternative forms of water that treat it as other than as a ‘natural resource’ and a commodity are marginalized (Linton, 2014). Even within the progressive ethos that runs throughout the pursuit of collaboration – one that emphasizes participation, inclusion and consensus-building – there lies a singular water made and remade through socio-technical-political forms of control.

Techniques of governance facilitate this by virtue of the embedded legal and political authority of decision-making processes. The jointness pursued through the institutional forms of CWG makes and is made by a modern ontology that privileges water as a knowable, abstract resource that can be efficiently measured and equitably supplied through coordination and control.

## Conclusion

It has been suggested that the concept of ‘governance’ has largely replaced ‘management’ in the water resources literature (Wegerich, Warner, & Tortajada 2014). As Håken Tropp (2007, p. 19) puts it, “‘Fixing’ various water-related challenges, such as dwindling water resources, insufficient services, and pollution, is now increasingly seen in terms of getting the ‘right’ governance system in place.” That the concept of governance has attracted growing attention is borne out through a basic literature review. In particular, collaborative governance is now consistently championed as one of the most promising paradigms of water resources management.

The touted benefits of CWG include increased participation and inclusion (Kallis, Kiparsky, & Norgaard, 2009), added efficiency and responsiveness, the peaceful management of conflict, the enhanced social and institutional capacity to deal with complex water issues, and the transfer of knowledge and best practices (Margerum & Robinson, 2015). The drawbacks of CWG include the need for substantial investment to develop and sustain partnerships, the increased size and complexity of governing bodies, ongoing political contestation between state and non-state actors, the potential for top-down decision making, and parochialism (Kark et al., 2015). There may also exist significant confusion about whether CWG is distinct from ‘regular’ water governance at all. While water professionals increasingly emphasize the utility of collaborative governance, there remains doubt as to whether it truly adds much novelty, or whether it is a strategic repackaging of old ideas.

Nonetheless, the increasing reliance upon CWG as a water management paradigm necessitates further critical evaluation. Given the evolution of the concept, emerging from the public administration discipline and now firmly situated in the environmental science/ecology literature, it stands to reason that there is a need to focus more fully on the political processes at its core. In contrast to the implicit assumptions found in much of the literature, politics does not begin and end with the ‘governance’ of water, defined in terms of management, coordination and allocation of resources, individuals and organizations. Claiming the political within CWG also means unpacking the ontological, epistemological and normative commitments that underpin relations to water and the drive to manage them. It is to conceive of the inherent sociality of water, including the constitutive process that identifies the divide between human water needs, natural water supplies, and the types of governance required to fill those gaps, increasingly leading to the establishment of approaches that are defined as ‘collaborative’. It requires realignment away from viewing collaborative governance as a depoliticized process of negotiation where shared and/or competing visions of water management are peaceably managed. In essence it requires some movement away from conventional understandings of ‘hydro-politics’, which construct top-down views of the study of water resources

planning and management, where water is the background site for timeless human stories of conflict and cooperation (Sivakumar, 2014).

Indeed, there is a tendency amongst scholars to focus heavily on distinct ‘lessons’ learned from practical experiences in collaboration, as well as the ‘necessary conditions’ for success in policy dialogues (Connick & Innes, 2001; Daniel, Pinel, & Brooks, 2013; Imperial, 2005). Such tendencies have distinct value, particularly for practitioners who are seeking to implement models, frameworks and blueprints for existing or planned water collaboratives. However, the absence of the political from the CWG literature is a curious phenomenon.

Relying on a thin understanding of politics, or removing any discussion of it at all, risks leaving CWG only as a ‘natural’ response to the ‘self-evident’ development of a weakened central government ceding a measure of control over water resources. Likewise, failing to engage with the concept of the political embedded in CWG means that the study of the phenomenon has no power or agency outside of producing ‘expert’ knowledge to be used to solve complex collective-action problems. It also risks reifying the shifts from government control of water to water governance as a natural development, absent the prevailing shifts in power that enable “key actors to frame one type of governing as inefficient, poorly performing, and in need of change” (Newell, Pattberg, & Schroeder 2012, p. 377).

There are many ways to engage with the concept of the political inherent in CWG. This article has argued that water governance is imbued with politics by virtue of the ontological foundations that determine *what water is*. If, as Jamie Linton (2010) reminds us, water is what we make of it, then it is incumbent upon researchers and practitioners to critically examine the assumptions, practices, technologies and histories that determine what the resource is, and how that leads to particular forms of control and management.

It has been argued here that CWG reflects a modern ontology of water. Water is understood as a *natural* resource – as H<sub>2</sub>O – meaning that it is abstract, measureable, knowable, and consistent in all cases. This depoliticizes water, dissociates it from particular social, economic, cultural, religious and ecological contexts, and reduces it to a single substance, commensurable across all cases (Linton, 2014). Indeed, the jointness that defines modern water is also one of the core aims of collaborative governance; the need for consensus and agreement across a range of varied actors reflects the desire for singularity in modern water. The effect of this, as the CWG literature shows, is the continued separation of water from its constituent socio-ecological existence in the early twenty-first century. CWG doesn’t *have to* reflect modern water, but by virtue of the lack of attention paid to the political/politics/power, etc., it cannot help but recreate a specific dominant ontology. Water is primarily seen as a stage upon which politics is played, rather than as an actant, something that plays an active role in shaping social, ecological and political realities.

## Notes

1. Agranoff (2012) has argued that there are differences between these terms and that it is better to view them along a continuum of collaboration.
2. Similar trends can also be observed using other databases. Google Scholar lists 148 articles published in 1999–2015, 93% of them in 2009–2015. In 2015 alone, 27 articles dealt with

CWG. Evidently, CWG has generated increased interest among academics, a trend that is indicative of the salience of the concept to ongoing approaches to managing water resources.

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