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Exploring discursive hydropolitics: a conceptual framework and research agenda

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ABSTRACT

Much has been written on hydropolitics, or on the interplays between transboundary water resource issues and politics. This article builds on recent calls for more research on the role of discourses in shaping hydropolitics. We propose a conceptual framework, inspired by critical discourse analysis, for the systematic investigation of how discursive practices construct and enact actors' power positions in transboundary basin governance. Our framework's added value lies in the typology of discourses we develop – that is, dominant, institutionalized, hegemonic and sanctioned – for a more precise analysis of discursive hydropolitics. We formulate a research agenda to operationalize our perspective on discursive hydropolitics and lay the groundwork for future empirical research.

Introduction: navigating transboundary waters

The Ganges–Brahmaputra–Meghna rivers basin is one of the world's hotspots for hydropolitical tensions. This is the conclusion several researchers reached after conducting a global assessment of transboundary watersheds and their likelihood of water-related conflict (Farinosi et al., 2018; De Stefano et al., 2017). According to these large-scale studies, the combination of water stress, high population density, economic dependency on agriculture and poor governance in the basin creates the perfect setting for hydropolitical tensions. Yet, this globally crafted potential for conflict is not as evident when examining the politics and dynamics in the basin. Scholars, when conducting qualitative analysis, revealed not only positive bilateral interactions between riparian states but also multilateral cooperation platforms that go beyond the state (Barua, 2018; Barua et al., 2019, 2018; Hanasz, 2017; Mirumachi, 2015).

The Ganges–Brahmaputra–Meghna basin is a prime illustration of the added value of conducting hydropolitical analyses at multiple scales. Assessing water interactions at a global level is useful to identify red flags, but it must be complemented by more indepth analysis at other levels. As De Stefano et al. (2017) recognize, local studies provide more insight into the unique contexts surrounding transboundary water governance.

They are helpful at demonstrating or refuting propositions identified at the global or even full basin level. Therefore, moving towards more comprehensive mapping of hydropolitical conflict and cooperation requires filling the gap in local hydropolitical data (Bernauer & Böhmelt, 2020), as well as embracing the complexity of political processes.

In many ways, hydropolitics *remains* politics. Data on historical water-related events, treaties, river basins institutions and hydro-meteorological features are relevant for studying trends in hydropolitical dynamics, but capturing the essence of the political nature of transboundary water governance entails examining other types of data. Alternative data include discourses and practices, which constitute a crucial source of information for understanding how hydropolitics are socially constructed and contested, and how they interlink with non-water-related interactions. Indeed, we can learn a lot about conflict and cooperation over transboundary waters by examining the various discourses in the basin and the actors behind them. For instance, in her analysis of the Tanakpur Barrage project in the Ganges River basin, Mirumachi (2013) showed how the securitization discourse deployed by the Indian 'hydrocracy' ensured the compliance of the Nepali government with the construction of the hydraulic infrastructure in its territory. Most recently, Williams (2020b) revealed the emergence of a multilateral discourse, mainly from Bangladesh and China, as a way to contest the Indian hydro-hegemony in the basin. Therefore, focusing on how and by whom such discourses are produced, and why certain ones become dominant while others remain subjugated, provides a very different perspective on the nature of hydropolitics.

We are fully aware that such a discursive approach to the study of hydropolitics is hardly new. However, we believe its full potential remains untapped. In a time when much emphasis is placed on developing analytical tools for identifying – and even forecasting – water conflict and cooperation, we reiterate the value of discourses in any analysis of transboundary waters, and of undertaking such discursive analysis systematically. That is precisely our aim with this conceptual study. We set forth a conceptual framework, inspired by the literature on critical discourses analysis, that can be a useful tool for the systematic study of discursive practices in hydropolitics. We believe that employing such a framework allows us to assess how actors, discourses and practices are interlinked, and how they mould the way we govern transboundary waters. We also put forward a research agenda to unlock the potential of discourses as hydropolitical data.

In this conceptual paper, we explore how discourses can reveal power relations in transboundary water interactions, and unpack the different types of discourses involved and their analytical added value. At the same time, we lay the groundwork for future empirical research where we will apply our conceptual framework to investigate transboundary water interactions through the examination of discourses.

The remainder of the paper is composed as follows. The next section presents an overview of the relevant scholarship on hydropolitics, and we show how discourses have progressively gained scholarly attention. The third section then develops and discusses our conceptual framework for a discursive analysis of hydropolitics. The fourth section discusses the need for systematic discursive approaches to hydropolitics, which constitutes our research agenda. Finally, the fifth section concludes by reflecting on the main implications of this new approach for the future of hydropolitics.

Literature review: diving into the realm of hydropolitics

Scholarship on hydropolitics is diverse, vibrant and more akin to a meandering river with numerous branches than a straight canal. As such, hydropolitical research draws on a prolific portfolio of theories from political science (primarily international relations, but also public policy, political economy and political ecology), environmental science, law (especially international water law and environmental justice), and science and technology studies.

With this wide-ranging theoretical background, hydropolitics scholars have tackled many intricate questions over the past decades, such as: Are transboundary waters a source of conflict or cooperation? The answer to the conflict or cooperation debate has changed over time. In broad brushstrokes, we can divide the explanations to the conflict or cooperation dilemma into three strands: (1) transboundary water as a trigger (or root cause) of conflict; (2) transboundary water as a stimulus for cooperation; and (3) transboundary water as an engine of both conflict and cooperation.

Early scholars of hydropolitics focused on the links between water and conflict. Proponents of this water conflict (and even *water war*) narrative examined the causal paths connecting water resources – particularly those in transboundary basins – with intra- and inter-state conflict. According to these scholars, the strategic essence of water, together with the increasing pressures on such resources and the socio-political tensions igniting over competition, make transboundary water basins the perfect scenario for local and international conflicts.

This water conflict thesis came under scrutiny after several scholars questioned the role of water as a causal factor in conflict. Without denying the occurrence of disputes over water resources (especially at the subnational level), various scholars defended the greater potential for cooperation over transboundary waters. The core of their argument is that cooperation over water is more rational than conflict because it is more cost-effective at ensuring long-term access to water supplies, yields a broad range of advantages and is resilient to turmoil in the basin, even between hostile states and when other contentious issues erupt into conflict. All this makes transboundary water basins an ideal situation for win–win cooperation.

The next wave of scholars came with a shift in the understanding of transboundary water conflict and cooperation. Instead of an *either/or* question or a state-to-state affair, interactions over transboundary water resources started to be perceived as complex dynamics with multiple tensions across multiple levels of policy action, embedded in interwoven political, legal, economic and social systems. The governance of transboundary waters is now seen as a layered edifice, with coexisting conflictive and cooperative relations. Most interestingly, this third wave of scholarship started to explore what constitutes the pivotal piece of our framework: discourses. Such accent on discourse – that is, the ideas, concepts and categorizations that actors produce, reproduce and transform into a particular set of practices and use to give meaning to physical and social realities – has a three-fold justification. First, the discourses constructed by the different actors around (or beyond) the basin define the problems associated with water and hence influence the spectrum of solutions considered. Second, the deployment of these discourses affects the policymaking process, as they provide the framework in which alternatives are evaluated and selected. Third, both the construction and deployment of such

discourses can reveal the power relations between actors of the basin. Or, as Allouche (2020) recently put it, 'hydropolitical interactions could, in a sense, be conceived as a battleground for ideas and power' (p. 287). Therefore, exploring how discourses are constructed and deployed, and by whom, helps fathom the complexity of transboundary water interactions.

The unfolding of hydropolitics scholarship has thus opened up new ways (among others, environmental justice, hydrosolidarity or feminist political ecology) to navigate the apparently simple but complex question of: Are transboundary waters a source of conflict or cooperation? Adopting a non-dichotomous and multilayered approach to hydropolitics has offered a more nuanced understanding of the nature of transboundary water interactions. The increasing attention to discourse has also helped enhance our knowledge of the social construction of hydropolitics. Yet, we believe there is still room for more conceptualization (and subsequent empirical investigation) of how such discourses can be used to extract interaction patterns within and across transboundary basins. This raises the need for a new framework in which the discourses take central stage, but with a focus on how their typologies and processes reveal existing power dynamics.

Setting our conceptual framework for discursive hydropolitics

Why, what and how discourses in hydropolitics

Since the starting – and central – point for our conceptual framework are discourses, we begin by reflecting on three fundamental questions:

- Why do we consider discourses as a valuable object of study when it comes to hydropolitics?
- What do we mean by discourse?
- How do we intend to analyse it?

To answer the first question, we engage with Michel Foucault's thoughts on power. In his seminal work on governmentality, Foucault (1991) developed a new, broader understanding of power. By defining government as the 'conduct of conducts' and governmentality as the 'ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power' (p. 102), Foucault acknowledged that power manifests itself through knowledge and practices as much as through institutional forms. Therefore, as Doherty (2007) summarized, power relations cannot be established, maintained, extended, resisted or mobilized into action without the mediation of discourse.

This Foucauldian interpretation of power means that we should understand hydropolitical relations not only as the actual interactions between the various actors over transboundary waters alone but also as the embodiment of a complex of representations and power relations. Such a view of hydropolitics invites an examination of the content and changes of this complex in its several discursive manifestations. It is through discourses that we can apprehend how power relations shape – and are shaped by – social structures and practices. Therefore, we embrace discourses because transboundary waters are governed through the material construction of infrastructures such as dams,

canals and irrigation networks, but also through the discursive construction of frameworks within which problems and policy responses are defined and negotiated. In essence, in asking: Who gets how much water, how and why? (Zeitoun & Warner, 2006), discourses can reveal much about the later.

Now that we have clarified the reason why we focus on discourses, the next step is to stop and explain what we mean by such term. The concept of discourse has been employed in several hydropolitical analyses, yet it is seldom clearly defined. This lack of definition is visible in the most recent scholarship on discursive hydropolitics. For instance, when examining the legitimacy of nationalist discourses surrounding transboundary water interactions in the Amu Darya, Tigris–Euphrates and Nile rivers basins, Allouche (2020) placed discourses at the same level as norms and ideas, but without explicitly specifying his understanding of the term. Similarly, Saklani et al. (2020), in their study of the securitization of the water discourse in the Ganges–Brahmaputra–Meghna rivers basin, did not clarify the meaning behind the 'water discourse' notion. Other scholars have inexplicitly described their interpretation of discourse. Hussein et al. (2020), in identifying the tools used by states' elites to justify and legitimize large-scale hydraulic infrastructure in the Euphrates–Tigris and Nile rivers basins, vaguely defined discourses when referring to critical discourse analysis as a method focusing on 'the way in which language is constructed and used to shape norms and behavior' (p. 4). Williams (2020a, 2020b) has been one of the few recent scholars to provide a detailed account of her interpretation. In an analysis of the role of discourse in transboundary water relations in the Mekong River basin, Williams subscribed to Hajer's (1995) conceptualization of discourse as an ensemble or group of 'ideas, concepts and categories that are produced, reproduced and transformed in a certain bundle of practices' (Williams, 2021, p. 727).

For us, discourse is not synonym to language. Discourses are structures and practices. This conception has a series of implications. First, discourses are 'sets of rules' both enabling practices and being reproduced (or transformed) by them. Thus, when considering discourses in hydropolitics, we do not mean studying the vocabulary used in speeches or policy texts, but rather the 'ordering of objects' (Foucault 1972). Second, discourses are always embedded in a medley of institutions, broadly conceived. Laffey and Weldes (2004) encapsulated it well when they defended that discourses circulate through and around sites of institutionalized power, sometimes reinforcing or challenging them, other times being completely ignored or marginalized by them. When exploring hydropolitical interactions through a discursive lens, we mean investigating the ideas regarding political action that are being generated and legitimated via interactions within the institutional context, and how such context both shapes and is shaped by these ideas. Third, and interrelated to the previous one, discourses are inherently political. They are about the production and distribution of power, and the struggle over knowledge and legitimacy. Therefore, when we look at discourses in hydropolitics, we mean studying the 'meta' discourses that structure the basin's reality and the reproduction of power.

There is empirical evidence for such a focus on the 'meta' discourses. Going back to the basin with which we opened this paper, the Ganges–Brahmaputra–Meghna River basin, we find several elements that indicate a connection between metanarratives and international hydropolitics. For instance, when examining the transboundary water governance of the Ganges–Brahmaputra River basin, Williams (2020b) found that infrastructure-oriented development discourses, with an emphasis on command and control of the river,

formed the basis of cooperation in the basin. Vij et al. (2020) also analysed the power interplay between Bangladesh and India over the Brahmaputra River, concluding that India's passive (or non-) participation in the Brahmaputra Dialogue meetings stemmed from internal security and securitization narratives. Such narratives, in turn, resulted from the internal struggles between the central government and the Assam and Arunachal Pradesh state governments.

The third and final question therefore is: How can we analyse discourses in hydropolitics? How 'meta' should discourses be for us to deem them relevant for our analysis? How micro should we go in identifying the actors constructing, reproducing or contesting such meta discourses? In essence, where should we begin and stop our discursive approach to hydropolitics? These are all hard choices that we have to make, making discursive hydropolitics a daunting endeavour. As Crawford (2004) shrewdly pointed out when discussing the challenges of discourse analysis, 'our analysis may not only be so large to be unwieldy and overwhelming, but it is also necessarily partial and subject to dispute by others' (p. 24). Indeed, our discursive enquiry is intrinsically subject to the discourses we consider (and those we dismiss). It would be impossible – and even ludicrous – to attempt to unpack all discourses in a basin, everywhere, anytime.

The answer to where we begin and stop thus requires going back to the aim behind our discursive understanding of hydropolitics. Since our goal is to use discourses as a tool to explore the power relations underpinning transboundary water relations, then the focus should be on the prevailing discourses that surround hydropolitical interactions. Discourses are neither the independent nor the dependent variable in our analysis, but rather the 'filter' we employ to examine how meaning-making processes flow. In other words, our analysis begins with exploring the variety of discourses engaged in representing the basin's hydropolitical reality at a given moment and ends with investigating how prevailing discourses lead to policies and practices.

Actors or discourses

As we previously mentioned, discourses form the starting and focal point of our conceptual framework. Yet, they are not independent from the social and institutional settings in which they are embedded. They are put forward by a great diversity of actors, ranging from the states and their governmental units to non-state entities such as non-governmental organizations (NGOs), multinational corporations, international organizations or even epistemic communities. For instance, as revealed by Hanasz (2017), the framing of the Ganges–Brahmaputra problemshed as a 'collective action' problem is part of the emerging globalization of regional water security issues pushed forward by international organizations and donors.

The crux of the matter then is: What is the most appropriate unit of analysis for exploring the discursive construction of hydropolitics, actors or discourses? In other words, shall we start by first identifying the actors that are central to the hydropolitical processes and explore their discourses, or rather by distinguishing the discourses that ground such processes and then the actors behind them? There is no unique answer to these questions. In their analysis of the domestic water policy processes influencing the international hydropolitics of the Nile basin, Luzi et al. (2008) focused on actors, and their roles, interests and networks, before analysing their discourses. Contrarily, when examining transboundary

water interactions on Lake Chad, Sayan et al. (2020) first spotted the discourses justifying (or blocking) the need for inter-basin water transfer projects, and later the coalitions of actors formed around such discourses.

Our framework follows this second approach, stirring 'from doers to deeds', as Kuus (2007) noted. This move demands shifting the spotlight from the actors to the fixation, competition, and change in discursive practices and structures (Müller, 2010). Drawing from the discourse coalition framework (Hajer, 1995) and discursive institutionalism (Schmidt, 2008), we focus on the interactive processes involved in discourse construction, reproduction and legitimation. From this perspective, actors become 'discourse-makers', institutions 'discourse-carriers' and 'discursive spaces', and hydropolitical interactions the outcome a 'discursive struggle' over decisions. By taking discourse as our unit of analysis, we aim to reveal how discourse coalitions form at multiple levels and scales, around shared frames – or storylines – how they compete for political influence, and how they structure the solutions offered to the policy problems they 'constructed'.

Our understanding of discourses is inclusive and inductive. First, it is inclusive because we recognize that prevailing discourse can be produced by different actors that intervene at multiple levels and scales. It is not only about the discourses put forward by governmental officials at the national level, but also by academics, NGOs and media outlets. Second, it is inductive since we seldom know in advance all the actors who take part in a prevailing discourse. Therefore, we do not define the boundaries of the actors in advance; instead, this becomes part of our research process. To do so, we explore actors and discourses that are not only related to water management per se and consider multiple types of variables, and different political and historical contexts.

Our typology of discourses in hydropolitics: sanctioned, dominant or hegemonic discourses

With this discursive understanding of hydropolitics, the question is how – and why – a particular discourse makes certain elements appear as 'appropriate' while others appear as 'problematic'. Foucault (1976), when reflecting on the power/knowledge nexus, introduced the notion of the 'regime of truth'. In his words, 'truth isn't outside power, or lacking in power'; on the contrary, 'truth is a thing of this world: it is produced only by virtue of multiple constraint and it induces regulated effects of power' (p. 131). That is to say that 'each society has its regime of truth, its general politics of truth', and with this Foucault means: (1) 'the types of discourse which [society] accepts and makes function as true'; (2) 'the mechanisms and instances which enable one to distinguish true and false statements'; (3) 'the means by which each [discourse] is sanctioned'; (4) 'the techniques and procedures accorded value in the acquisition of truth'; and (5) 'the status of those who are charged with saying what counts as true'.

The notion of 'regime of truth' helps us understand the power relations that underpin hydropolitics. Therefore, it should not come as a surprise that many hydropolitics scholars have been interested in the 'regimes of truth' that define and sanction what is held to be the normal and desirable way to think and act with regard to the use of water resources, and marginalize or silence other ways. It is also hardly surprising that the 'sanctioned discourse' concept has become a popular lens for explaining hydropolitical power dynamics. For instance, it was through the sanctioned discourse that Zawahri and

Hensengerth (2012) examined the channels of influence available to environmental activists to affect the direction of the watershed management of the Ganges and Mekong rivers basins. It was by studying the diverging sanctioned discourses of the Uzbek and Kyrgyz elites that Kraak (2012) explained the governability of the Syr Darya River basin and, in particular, the operation of the Toktogul dam. It was by comparing the official, governmentally sanctioned discourses in Jordan and Syria regarding their 1987 bilateral agreement that Hussein (2017) revealed the hydropolitical dynamics over the Yarkmuk River basin. Most recently, it was by analysing the evolution of the sanctioned discourses in the Indus, Ganges–Brahmaputra and Mekong rivers basins that Williams (2020b) detected the emergence of alternative approaches to the 'hydraulic mission' paradigm. And it through this very same concept that Wine (2020) explored the influence of the politicization and securitization of water on the hydrologic science community.

Yet, as it is frequent in hydropolitics, scholars have conceptualized the sanctioned discourse in quite different ways. Trottier (1999), anchoring her work in the thinking of Charles Tripp, was the first scholar to use the concept of 'sanctioned discourse' to decipher the circumscribed way in which certain ideas and concepts are allowed – or not allowed – to exist within the way that water is talked about. According to Trottier, the sanctioned discourse refers to a 'normative vision in which the thought process of an analyst or a political actor is locked', or, generally put, a 'largely ethical paradigm that determines the hypotheses we can put out and the questions we can ask' (p. 164). Trottier illustrated the notion of sanctioned discourse with the case of Palestine. By analysing existing power constellations, Trottier showed that the Palestinian Authority promoted two 'parallel' sanctioned discourses, one targeting local actors, particularly local elites controlling water in Palestinian villages, and the other international actors, mainly donors.

Concurrently to Trottier, Turton (2000) developed another definition of the sanctioned discourse in his glossary of hydropolitical concepts. Turton viewed the sanctioned discourse as the 'prevailing or dominant discourse that has been legitimized by the discursive elite within the water sector at any one moment in time' (p. 2). That is, 'it represents what may be said, who may say it is and how it may be interpreted, thereby leading to the creation of a dominant belief system or paradigm'. From this standpoint, the sanctioned discourse is a form of 'hydropolitical ideology' pushed forward by the 'discursive elite', which comprises those who are in a dominant position within bureaucratic entities and who can determine and legitimize the nature, form and content of the prevailing discourse.

Turton's contemporaries shared his conceptualization of the sanctioned discourse. Allan (2003, p. 21), when reviewing the emergence of the integrated water resources management paradigm, claimed that 'a discourse is sanctioned or not by the extent to which the policy is the result of what social theorists call a hegemonic convergence'. This is because, from Allan's perspective, 'all policy making discourse is partial in that it is made by coalitions, which reflect those who can best construct and deliver the most persuasive arguments'. In this regard, 'policy outcomes are the result of elites making deals selectively with groups that cannot be gainsaid' (p. 2).

Jägerskog (2002, 2003) also referred to Turton's conceptualization in his analysis of the water negotiations between Israel and Palestine, and between Israel and Jordan. Jägerskog also linked the concept of the sanctioned discourse with Capano's (2003) notion of the 'public policy paradigm', which defines the boundaries of what is thinkable,

possible or acceptable. Furthermore, Jägerskog defended that, for a deeper understanding of why certain discourses become sanctioned and others do not, it was useful to refer to aspects of risk theory, as actors use the notion of risk as a tool for sanctioning their respective discourses.

Feitelson (2002) also focused on the shifts of the sanctioned discourse over time when examining the 'win-sets' available for negotiators in negotiations between Palestine and Israel. For him, the sanctioned discourse is a 'normative delimitation separating the types of discourse perceived to be politically acceptable from those that are deemed politically unacceptable at a specific point in time' (p. 298). Furthermore, the author underlines that the sanctioned discourse is determined by those in power and that elites can also affect the constitution of a sanctioned discourse. In this light, Feitelson considers that discourses are sanctioned by those in power, in function of their perceptions of what is politically logical (p. 298).

Trottier (2007) further expanded the concept of the sanctioned discourse by looking at structures of signification and domination. In examining the impact of the separation fence on the Israeli-Palestinian hydropolitical relations, Trottier argued that the rules governing water resources take two essential shapes: normative sanctions and constituting meaning. On the one hand, the normative sanctions – and hence the sanctioned modes of discourse – imply a structure of domination, translating directly into power asymmetries. On the other hand, the production of meaning – which occur through the construction of interpretative schemes, or discourses – support a structure of signification. In turn, these interpretative schemes can reinforce the structure of domination when they become hegemonic.

Overall, besides their slight but profound differences, the previous definitions demonstrate the need for an enhanced understanding of the different types of discourses structuring hydropolitics and of their interplays. To better understand ongoing discursive battles, one may want to address key questions such as: Must discourses be dominant to be sanctioned? Are sanctioned discourses always the dominant ones? And what about the hegemony of discourses: are all sanctioned discourses necessarily hegemonic?

As far as we are aware, Hussein (2016) has been the only scholar attempting to discern between the different types of discourses. In his opinion, 'a dominant discourse is the prevailing opinion and views', whereas 'the sanctioned discourse is the one legitimized by someone'. Therefore, 'the sanctioned discourse per se can be dominant but can also be a non-dominant discourse if another sanctioned discourse results to be more powerful' (p. 29). Furthermore, for Hussein, a hegemonic discourse is a dominant one accepted at the 'subconscious level' by the majority of people. However, he clarified that 'a hegemonic discourse is not necessarily sanctioned discourses, nor is a sanctioned discourse always hegemonic, even if it is usually dominant' (p. 29). While Hussein's efforts shed some light on the distinction between sanctioned, dominant and hegemonic, there is still room for more clarity.

Many questions remain unanswered. When can a discourse be held as sanctioned, dominant or hegemonic? Furthermore, by whom should the discourse be legitimized to be considered sanctioned? Is it the political ruling class, or also the economic, cultural and intellectual elites? How does this legitimization take place? And, equally important, at what scales and levels do these different discourses take place?

To answer these questions and offer more systematicity in the discursive analysis of hydropolitics, our framework develops four typologies of discourses based on Hajer's (1995) discursive approach:

- First, we will speak of a *dominant* discourse when there is 'discourse structuration', that is, when we draw on the concepts or categories of a given discourse to understand or frame a particular issue. A dominant discourse is thus one that structures our understanding and articulations. To give an example, the discourse of integrated water resources management (IWRM) is dominant because, to make a reasonable contribution to the discourse of water governance today, one cannot deny, for instance, the importance of taking the river basin as the unit of reference.
- Second, we will speak of an *institutionalized* discourse when there is 'discourse institutionalization', that is, when a given discourse becomes solidified in particular social practices and institutional arrangements. Hence, an institutionalized discourse materializes in important societal and governmental institutions. Going back to the previous example, the discourse on IWRM is institutionalized because it has found its expression in many different policy frameworks around the world (Petit & Baron, 2009).
- Third, we will speak of a *hegemonic* discourse when it is both dominant and institutionalized (Molle, 2008). From this perspective, all hegemonic discourses are dominant, but not all dominant discourses are hegemonic.
- Last, we will speak of a *sanctioned* discourse when there is 'discourse legitimization', that is, a given discourse is endorsed by power elites, which, in international hydropolitics, are state representatives (politicians, civil servants or diplomats). Note that for other analytical purposes – for instance, subnational hydropolitics – the power elite might also include activists (from NGOs or more informal movements), lobbyist (from industries) and experts (from the states' apparatus or acting as independent researchers). Such endorsement can be explicit or implicit, be based on material or procedural premises, and can happen at different scales and levels.

We illustrate these four conceptualizations of discourses – sanctioned, dominant, institutionalized and hegemonic – in Figure 1.

Our distinction between the sanctioned, dominant and hegemonic does not mean separation. As Hajer (1995) explained, the discursive struggle is not a matter of two
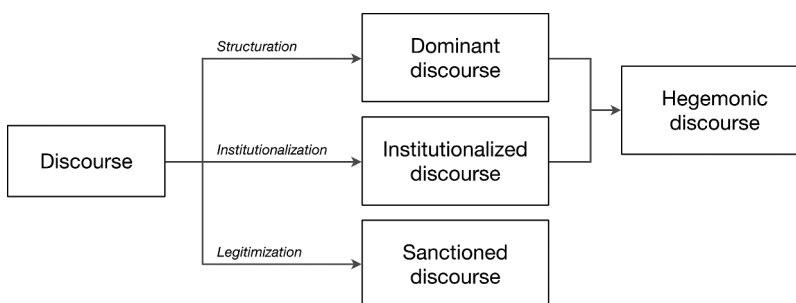
Figure 1. A typology of discourses to analyse hydropolitics.

separate discourses competing: it is about how specific discursive elements are related. Consequently, we believe that such typology provides a useful tool to understand empirical complexity, to identify the multiple dynamics of discursive struggles, and to explore the main variables that affect its outcome. Moreover, such typology can help explore the politics of scale, as framed by Swyngedouw (2004) and Cash et al. (2006). By looking at the structuration, institutionalization and legitimization of discourses, we can start identifying the scales (and levels) from which actors intervene. Most importantly, we can begin to deconstruct how actors redefine, contest, or restructure particular scales and levels to advance in the discursive struggle, and how changes in the scalar configurations affect the power relations between actors and, ultimately, the hydro-political interactions.

Operationalizing our conceptual framework for discursive hydropolitics: a research agenda

In our view, a discursive approach to hydropolitics is truly about understanding four distinctive elements: (1) the features of discourse typologies; (2) the processes underlying the discursive struggle; (3) the explanatory factors behind the dynamics of such processes; and (4) the patterns emerging from discursive interactions. Together, these elements will form the basis (and novelty) of our research agenda.

First, as shown above, until now there has been a degree of conceptual ambiguity when undertaking a discursive analysis of hydropolitical interactions. While the sanctioned discourse has become a widespread concept in hydropolitics, the question of whether it is the most appropriate one remains open. Why should we focus on the sanctioned discourses and not on the dominant or institutionalized ones instead? Along these lines, we do not know how these different concepts overlap. For instance, do sanctioned discourses usually coincide with the dominant or institutionalized discourses? Research on the actual commonalities and differences between the types of discourse is practically inexistent in hydropolitics scholarship.

Second, although our framework attempts to provide more conceptual clarity, future research should elucidate how exactly each typology of discourse arises. More particularly: How do the processes of discourse structuration, institutionalization, or legitimization take place in reality? What drives these processes? How does a given discourse end up structuring our perception and interpretation of reality? How does a given discourse become endorsed by the power elites? And the never-ending question: At what scales and levels? Here, we need a systematic and in-depth analysis of the ways hydropolitical discourses are (re)produced and, drawing from Lascoumes's (1996) 'transcoding' concept, of the ways normative and cognitive frameworks are reshaped, recycled and reinterpreted.

Third, we must understand the explanatory factors behind these discursive processes. Are discourse structuration, institutionalization and legitimization shaped by credibility, acceptability and trust, as Hajer (1995) argued? By the social, political and economic capital of the actors involved in the discursive battle, as Jägerskog (2002) affirmed? Or by the ideational congruence and constituency of the discourse coalitions, as Leifeld and Haunss (2012) sustained? It is essential to characterize such processes' moderating and mediating factors, as they will likely depend on the actors' constellations and institutional

settings. This characterization will allow the development of a comprehensive model of the discursive construction of hydropolitics.

Finally, there is an increasing need for more research on the discursive patterns in hydropolitics. For example, is there a correlation between the features of the discourse structuration, institutionalization, and legitimization processes and the conflictive and cooperative nature of the international hydropolitical interactions? More so, can we establish a connection between the actors' constellations behind the discourses (e.g., the predominance of third-party actors in the coalitions shaping the dominant discourses) and the resulting international hydropolitics? If we could trace these patterns, we would identify the best entry-points for conflict transformation and, hence, provide some empirical evidence to ongoing water diplomacy initiatives. However, for this to be achieved, we need to investigate discursive processes both in specific basin case studies and in a cross-basin comparative manner. This comparison of basins' discursive dynamics will help us uncover patterns around hydropolitical interactions and, ultimately, gain more generalizability of our findings.

Considering these elements, we emphasize three pillars that define our research procedure: systematicity, inductivity and triangulation. First, we need systematicity in the discursive analysis of international hydropolitics if we claim that discourses can be a relevant source of hydropolitical data, or that they can reveal the power relations underpinning hydropolitics. However, we are aware that we cannot explain all hydropolitics just by looking at discourses. In this vein, future discursive hydropolitics must bring in insights from ongoing global studies of treaties, river basin organizations and events. This complementary between global and in-depth analyses will enable a better understanding of the different factors that lead to tension or cooperation over transboundary waters.

Second, an inductive iteration approach (Yom, 2015) allows us to constantly refine our research hypothesis in function of empirical analysis. Discourses that structure hydropolitics are, by essence, multiple, difficult to grasp and to categorize. Acknowledging existing diversity and complexity, our aim is to constantly incorporate realities from the field to improve and adapt our conceptual framework.

Third, selecting and categorizing discourses implies a deep understanding of empirical reality, including actors' configuration as well as political, institutional and cultural settings. Testing assumptions about the status of specific discourses requires integrating multiple types of actors and viewpoints and accommodating different cultural perspectives in the research process. As such, assessing a prevailing discourse needs confirmation and the triangulation of various sources. Such process points to the involvement of multiple ontologies going beyond one single category of actors (be it academia, policy-making, practice, etc.) and in-depth fieldwork conducted in collaboration with research and organizations engaged in regional patterns and discourses.

Conclusions

As shown by this study, the field of hydropolitics entails a great diversity of approaches and frameworks. It provides multiple keys for understanding transboundary water interactions, be they conflictive, cooperative or both. In such a vibrant field, our aim with this conceptual piece is two-fold. On the one hand, we aim to provide additional theoretical insights into

the dynamics of hydropolitics by looking at the role of discourses in transboundary water interactions. While this discursive perspective of hydropolitics is far from new, we believe our conceptual framework enables a more structured analysis of the different types of discourses and subsequent dynamics that shape transboundary water interactions and processes. On the other hand, we aim to provide a research agenda to operationalize this discursive study of hydropolitics in a systematic manner. In this sense, this conceptual piece lays the foundation for future empirical research, in collaboration with regional actors, for a better understanding of conflict and cooperation in transboundary waters and, in the long run, for the identification of potential patterns contributing to explain how hydropolitical interactions and narratives evolve across levels and scales.

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